Shipbuilding Ship operation Ship maintenance

Marine Review

NEW YORK CLEVELAND LONDON

VOL. 51 DECEMBER, 1921 No. 12

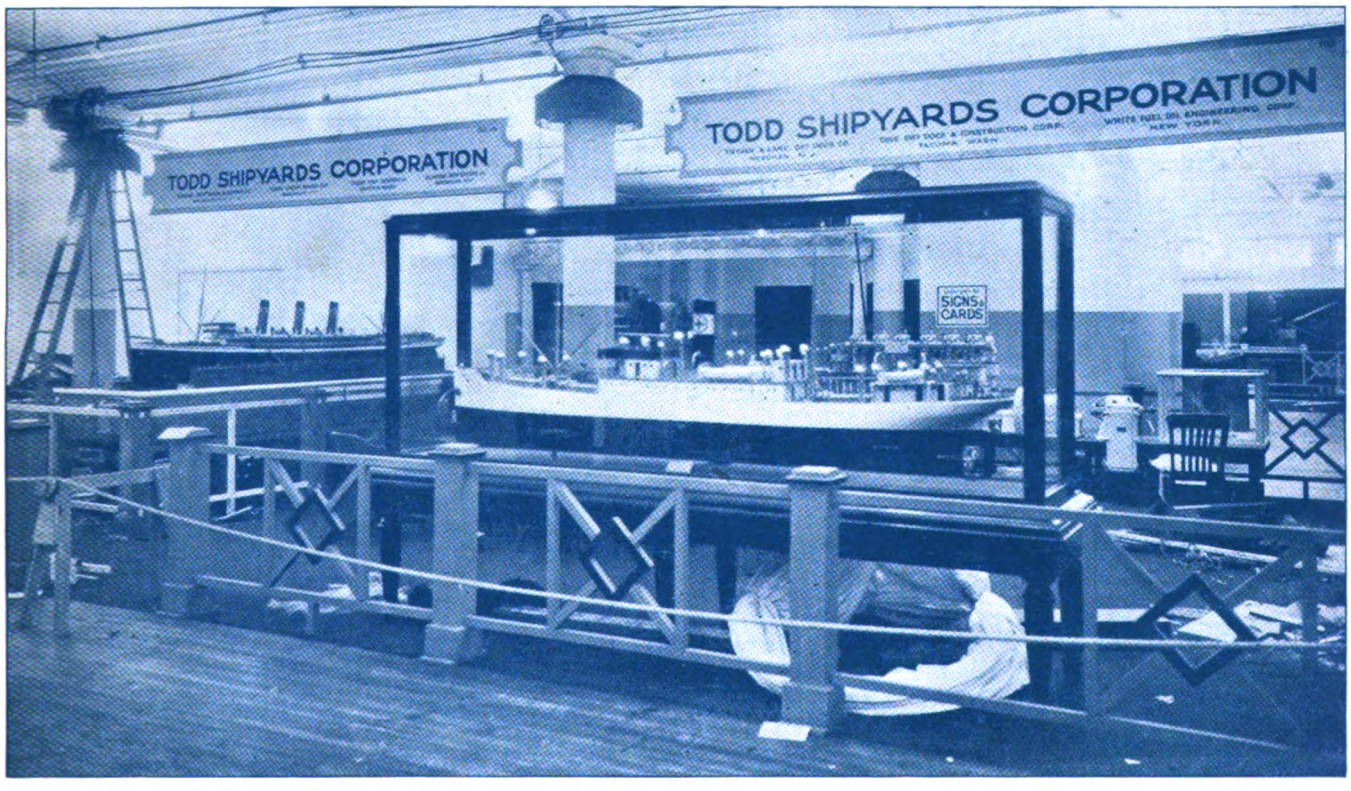
Co-operative Show Makes Good

United Strength of Marine Equipment Firms Backs Exposition of Value to Entire Industry

SUPPLEMENTED with features which make it distinctive, the third annual marine show held in New York, threw open its doors to the public on Monday, Nov. 14. The show this year is being staged at the Central Mercantile building.

During the week the annual convention of the Society of Naval Architects and Marine Engineers and of the Marine Draftsmen's association are scheduled, the former holding its meetings at the Engineering Societies building as usual while the latter organization consented to hold its meetings in the same building with the marine show. These and other organizations interested in marine work furnished a multitude of interested guests and visitors such as has never before attended a marine show. Their interest was self-evident.

The spirit of this year's exposition is significant. From the first day, the success of this attempt to hold the annual show by mutual co-operation of the manufacturers producing marine equipment, has been assured. The show was staged by the Marine Equipment Association of America. While it was thought best not to exclude the general public, many people in the past having shown no further interest in the marine shows than to carry away free literature, the attendance has been restricted by the use of badges. Appropriate badges were distributed to members of the association and associate members. Furthermore other badges were distributed to naval archi-



VIEW OF BIG EXHIBIT PHOTOGRAPHED A FEW HOURS BEFORE THE FORMAL OPENING OF THE SHOW. THE DRYDOCK AT THE LEFT IS A WORKING MODEL WHICH, WITH THE MINIATURE STEAMERS, REPRESENTS MONTHS OF PREPARATION

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

tects, draftsmen and other guests, who are judged to have a professional interest in the exhibits displayed.

With this as a background upon which to work, the officers of the equipment association arranged a program of features designed to appeal especially to the professional visitors and others who have a definite interest in marine affairs. On Monday, Senator William M. Calder of New York, and Representative G. W. Edmonds of Pennsylvania, one a prominent leader in the senate commerce committe and the other chairman of the house committee on merchant marine and fisheries, were invited to open the show with appropriate addresses. This was a feature of the show when the doors were thrown open at 2 p.m. That night was designated as merchant marine night and for the entertainment of the visitors, the Todd Shipyards Corp. kindly loaned the Robins Dry Dock marine band.

Tuesday morning at 10 o'clock the show got seriously under way. Then began that feature of the exhibit which was novel. Although the show was opened at the early morning hour, the public was not invited. It was decreed that only guests should be admitted as the day time was set aside for business conversations between representatives of the exhibitors and those who wish to buy.

During the last few days of the week the conventions of the naval architects, marine engineers and marine draftsmen are in session and Thursday and Friday were given over to the naval architects.

Thursday night is designated as shipbuilders' night and for this occasion the Todd Shipyards Corp. donated the use of the Tietjen & Lang Drydock band. Friday is designated United States shipping board night, and Commissioner Edward C. Plummer, of the shipping board, was invited to make an address. Saturday is designated as marine draftsmen's day.

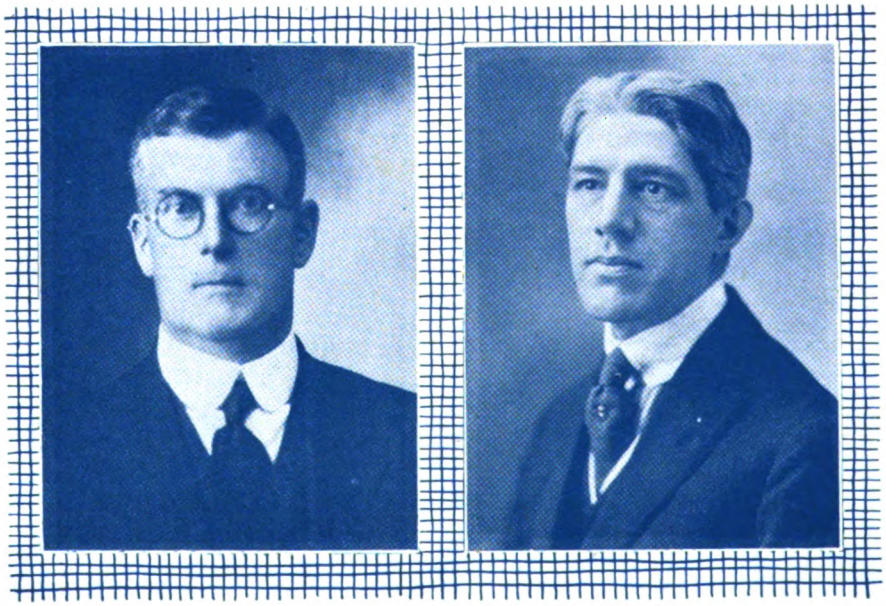
Officers of American Society of Marine Draftsmen

President
CHARLES E. DEISER, Philadelphia.
Vice President
E. H. MONROE, Philadelphia.
Secretary
B. G. BARNES, Quincy, Mass.
Treasurer
J. S. SADLER, Norfolk, Va.
Executive Committee
G. W. NUSBAUM, Washington.
A. G. HAAG, Baltimore.
J. THOMPSON, Bethlehem, Pa.

Officers of New York Branch

President
W. W. ROBERTSON
Vice President
J. H. DIALOGUE JR.
Secretary
R. R. DOERFLINGER
Treasurer
L. D. CONRAD
Board of Governors
P. MITCHELL
H. A. DUNHAM
F. J. ADLER

Marine Draftsmen Hold Annual Meeting



BERTRAM G. BARNES
Secretary, American Society of Marine Draftsmen

CHARLES E. DEISER
President, American Society of Marine Draftsmen

Another important marine convention held in New York in conjunction with the annual marine show, is the tenth annual meeting of the American Society of Marine Draftsmen. This convention will be held in the same building as the marine exposition, the Central Mercantile building, Sixth avenue and Eighteenth street, New York, for three days, Nov. 17 to 19 inclusive, the regular business and professional sessions beginning at 10 a. m., while the evenings will be devoted to social functions arranged by the New York branch of the society.

The national executive committeemen of the society will meet at 10 a. m. Thursday, Nov. 17, in the convention headquarters, Hotel Breslin, at Broadway and Twenty-ninth street, New York City. The committee will examine the credentials of the representatives from the following branches: Delaware River, Boston, Quincy, Mass., Bridgeport, Conn., Bath, Me., Connecticut, District of Columbia, Hudson River, Newport News, Va., Bethlehem, Pa., and New York. The auditing committee will meet at the same time and place to examine the treasurer's accounts and the standing of all the branches.

On Thursday evening, the executive committee and visiting representatives will attend the marine show in a body. The New York branch of the society, Branch No. 23, is participating in the exposition with a display of draftsmen's work. Friday, Nov. 18, the regular business session will include roll call, announcements, minutes of the 1920 convention held in Washington, proposals of amendments to the constitution and by-laws, report of special committees, report of officers, report of executive, standing and special committees and also reports from the various branches.

Saturday brings business and professional sessions with these papers:

"Design of S. S. VICTORIA," by F. J. Adler.

"Arcoconstruct System," by Frank Nichols, N. A.

"Features of Diesel Engine Design," by W. F. Paradies.

Saturday evening at the Hotel Breslin, the society will hold its annual banquet, marking the close of the convention. The diners will be enlivened by professional entertainers.

Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

What Is on Display at Big Show

Visitors Find Unusually Complete Array of Equipment Designed for Efficiency and Economy

PRACTICALLY every exhibit placed upon the floor this year is an exhibit made for business. Little of the merely complimentary and scenic is in evidence. Each company has arranged its display for utility. Therefore, while the actual floor space covered is not so large as at previous marine shows, the material on display is just as extensive.

Following is a list of exhibitors together with a complete directory:

American Brass Co., Waterbury, Conn. Booth 75. Exhibiting brass and composition wire, pipe, sheets, etc.

American Car & Foundry Co., 165 Broadway, New York. Booth 150. Represented by Messrs. F. C. Cheston, D. B. Wallace, and W. M Earl. Exhibiting electric rivet heater; electric scarfing heater; electric rod heater.

American Engineering Co., Philadelphia. Booths 81 and 96. Represented by Messrs. P. E. Kriebel, marine sales manager, D. C. Spencer, E. B. Bryant, C. V. Koons, F. W. Kay, R. C. Lamond, and H. Buckholtz. Exhibiting 35 horsepower electric winch; electrohydraulic steerer, pump driven and controlled by a hydraulic telemotor; electrohydraulic winch; electric windlass.

American Legion Service—Booth 182.

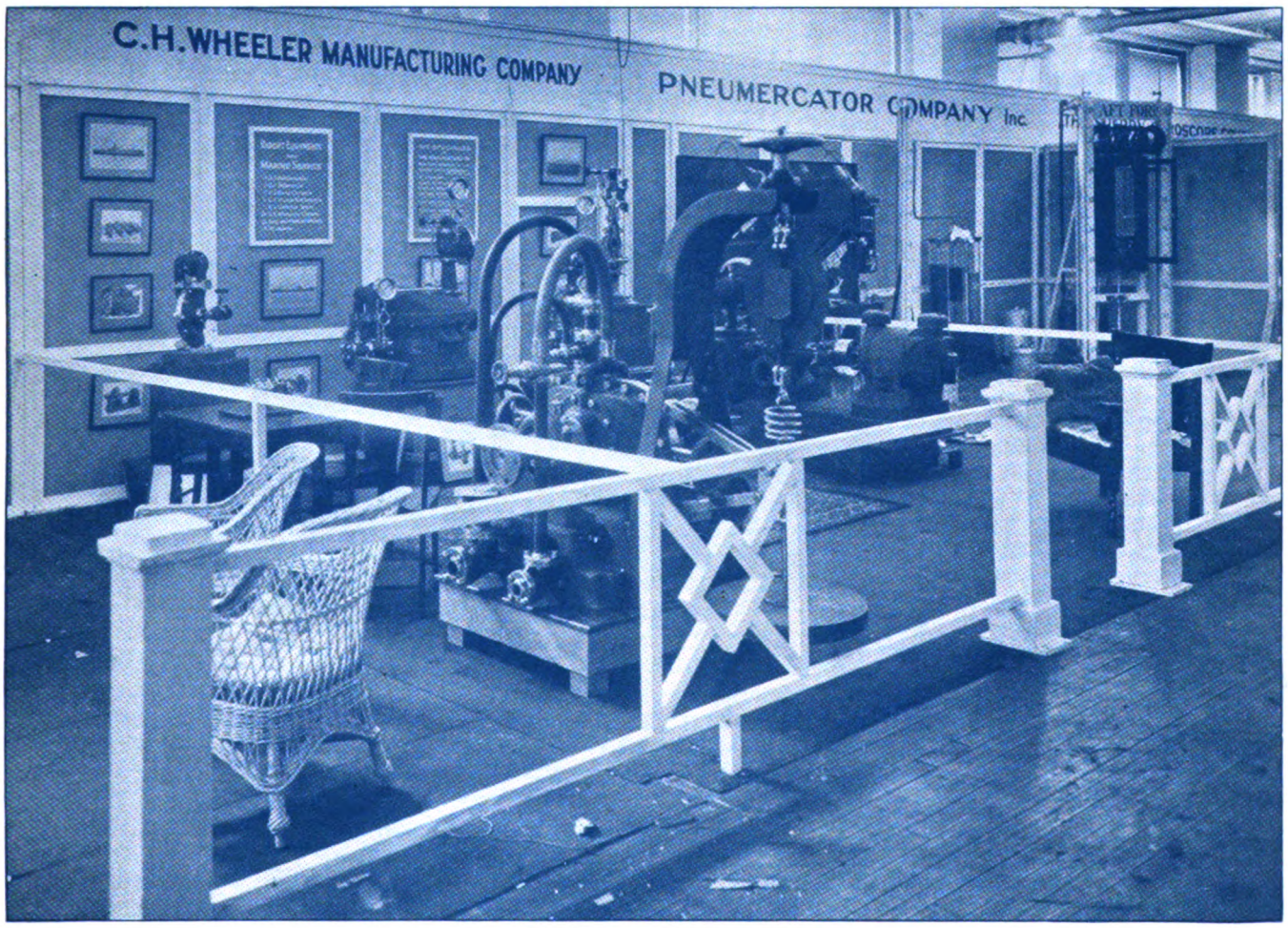
American Manganese Bronze Co., Holmesburg-Philadelphia. Booth 63. Represented by Messrs. C. R. Spare, T. H. Addie, C. S. Bower and D. V. Williamson. Exhibiting bronze propeller blade; manganese bronze propeller blade; charts of comparative tests on propeller metals; photographs of installations, etc.

American Steel Foundries, Chicago. Booth 159. Represented by A. T. Jones. Exhibiting anchors.

Asbestolith Mfg. Co., 1 Madison avenue, New York. Booth 206. Represented by R. C. Burnside, president. The adaptability of its material for ship decking is illustrated by several steel plates, covered with the material, and which have been in use for a number of years on ship decks. Some of the material has been removed to show that practically no corrosion of the steel has taken place. This covering as applied to wood is shown by a small flight of stairs and other samples, illustrating its adaptability for buildings, factories, churches, private homes, etc. The material marked off in squares on a steel plate, giving a decorative effect, is also shown.

Ashton Valve Co., 126 Liberty street, New York. Booth 219. Represented by Charles W. Buckelew. Exhibiting safety valves, relief valve, whistles, pressure and vacuum gages, gage and boiler testing outfits.

Babcock & Wilcox Co., 85 Liberty



OPERATING EQUIPMENT ADDED TO THE INSTRUCTIVE VALUE OF THE EXHIBITS

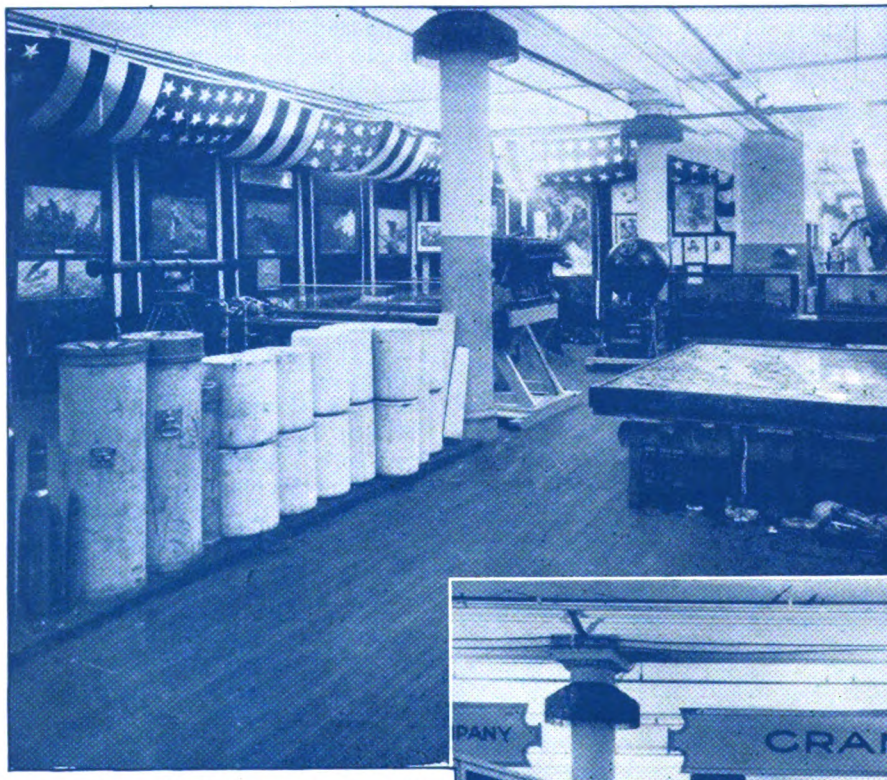
Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

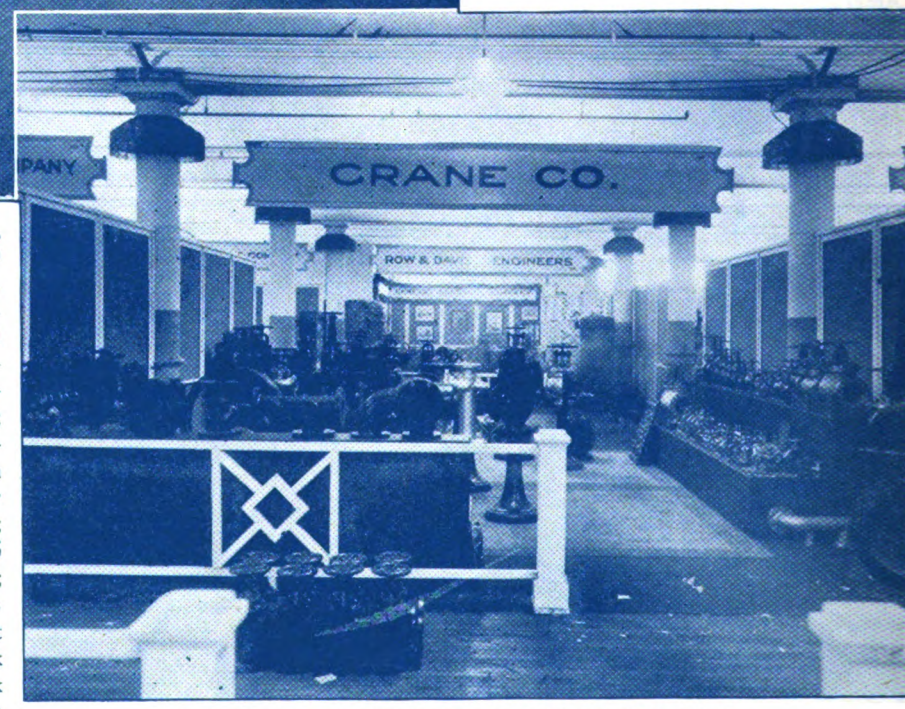
street, New York. Booths 16, 17, 18 and 19. Represented by Messrs. J. Coleman, J. H. King, J. Graham, T. B. Stillman, E. A. Colson, and C. W. Middleton. Exhibiting drawings of half actual size of various types of boilers; electric concentration indicator; models of oil burners, headers and all valves and fittings as installed on boilers.

man to things nautical. Since the first exhibition in New York last January, the line has been largely increased and more than a dozen different engines from a single cylinder oscillating ⅜ x ⅝-inch to a compound tugboat engine ¾ x 1⅛ x ¾-inch have been added. New boilers and boats have also been designed to match the new engines and

L. Barnwell and William McElhaney. Exhibiting a 2-ton refrigerating plant, a ¼-ton compressor, and parts for CO_2 machines.

Chase Metal Works and Chase Rolling Mill Co., Waterbury, Conn. Booth 46. Represented by J. F. Griffin, R. G. Barton, H. B. Snyder, M. A. Joy, A. G. Craft. Exhibiting manufactured nonferrous products such as brass, copper and bronze sheets, rod, wire and tubing. The exhibit comprises the following products: Brazed tubing, showing the original sheet, the forming process, welded seam and finished material; seamless tubing, showing the original billet or cast shell with intermediate sizes during the drawing operations; rod of various alloys, round, square, hexagonal and many other shapes, both drawn and extruded; sheet brass, ordinary brass alloys, bronze and nickel silver; wire, coils of wire of various composition, including bronze and phosphor bronze wire; miscellaneous samples of finished products, bent into various forms to illustrate the strength and ductility of rods, wire and tubing; microphotographs showing the crystalline structure of the various alloys





EXHIBITS OF PRIVATE FIRMS AND OF THE NAVY

Bethlehem Shipbuilding Corp., Ltd., Bethlehem, Pa. Booths 163, 164, 180 and 179. Represented by Messrs. K. W. Heinrich, sales engineer, A. V. Reynolds, advertising department, and other representatives of the sales department. Exhibiting a line of products which include: 25-ton evaporator; 14-inch centrifugal pump direct connected to 9 x 8-inch vertical steam engine; 9½ x 7 x 15-inch dual air pump; 3½ x 2½ x 5-inch feed pump; 8½ x 6 x 18-inch feed pump; 7¼ x 5 x 10-inch horizontal fuel oil pump; 10½ x 8 x 22-inch pair of feed pumps and tank; pump body and valve chest 21 x 14 x 27-inch feed pump; 7 x 8 x 18-inch general service pump; 4½ x 5 x 11-inch general service pump; a duplex ram hydraulic telemotor with the transmitter and receiver connected showing the manner in which it is operated; a complete mechanical oil burning system including pumps and a section of the furnace front; and marine valves and fittings.

H. E. Boucher Mfg. Co., 150 Lafayette street, New York. Booths 84 and 93. Represented by Dwight S. Simpson. Exhibiting miniature marine reproductions with the avowed intention of educating the boy and the young

spring and electric motors and storage batteries make this the most complete "miniature shipyard" to be found anywhere and so far as known, the only one of its kind in this country. Practical miniature sail and power boats are also shown and one or two examples of the company's exhibition models.

Brunswick Refrigerating Co., New Brunswick, N. J. Booth 135. Represented by Messrs. W. O. Whitney, W.

and samples of rod and tubing showing the flanging, flattening, expansion, crushing, twisting and other physical tests, for strength, ductility and hardness required by the United States government and various consumers.

James Clark Jr. Electric Co., Louisville, Ky. Booth 231. Represented by Messrs. W. W. Crooker, sales engineer, and A. H. Briggs. Exhibiting electric driven tools, including portable

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

and stationary drills and grinders.

Coen Co., 50 Church street, New York. Booth 136. Represented by Messrs. Frederick Hall, H. C. Chamberlain, F. S. Harper and William Wampler. Exhibiting full fuel oil burning systems, including a duplex pump, patent air register, new 1921 model burner and new 1921 model cleanable heater.

Crandall Engineering Co., East Boston, Mass. Booth 58. Represented by J. Stuart Crandall. Exhibiting photographs, etc., of drydock installations.

Crane Co., Chicago. Booths 116 and 147. Represented by Messrs. F. C. Bradbury, J. F. Duffy, E. Morgenthal and G. E. Barker. Exhibiting a complete line of valves and fittings for all types of ships.

Crane Packing Co., Park Row building, New York. Booth 232. Represented by Messrs. Julian N. Walton and A. W. Payne. Exhibiting flexible metallic packings; process of packing surface condensers, so arranged that actual demonstrations and experiments may be conducted for the benefit of those interested in surface condensers.

M. T. Davidson Co., 154 Nassau street, New York. Booths 115 and 148. Represented by Messrs. John Lowe, William E. Brennan, William C. Newell, F. O. Kompass, Thomas J. Rogers. Exhibiting different types of vertical marine pumps with improved valve gear, designed for high steam pressure without internal lubrication. The company's ash ejector is also shown as well as other machines built by this company.

Diamond Power Specialty Co., Detroit. Booth 158. Represented by Messrs. F. W. Leahy and F. W. Lambert. Exhibiting full size working models of various marine soot blowers, including the following: Rear end blower for Scotch marine boilers, blower for Scotch marine boilers; front end blower for Scotch marine boiler; revolving blower for water tube boilers; valve-in-head blower for water tube boilers; right angle drive blower for water tube boilers. In addition are samples of calorized and uncalorized metal which have been tested at high temperatures.

Ellcon Co., 50 Church street, New York. Booth 127. Represented by Messrs. William Wampler, Frederick Hall, Allen Koenig and G. H. Ord. Exhibiting special tread safety step for engine room ladders and grating, particularly adaptable for fireroom floor plates in the way of oil burning installations; enamel pipe for hand rails, and special metal for tailing, fittings and electric light fittings; curtains for steamships, and reinforced flexible tubing for oil-burning equipment.

DISPLAYS WERE DESIGNED TO INTEREST THE EXPERT

Fairbanks, Morse & Co., 30 Church street, New York. Booths 121, 122, 141 and 142. Represented by Messrs. J. Jernberge and T. Drennen. Exhibiting a semidiesel 200-horsepower engine; a direct reversible marine engine; a 30-horsepower marine engine direct connected to generator for ship lighting and charging batteries. Also exhibiting a marine type power pump; marine type centrifugal pump, and a ½-ton refrigerating machine, motor driven.

Foster Marine Boiler Corp., 111 Broadway, New York. Booth 190. Represented by Messrs. J. J. Nelis, J. C. McKenzie and F. Glander. Distributing literature describing the company's marine water tube boiler. Exhibiting key caps and a roller tool used in connection with these caps.

General Electric Co., Schenectady, N. Y. Booth 9. Represented by L. W. Shugg, W. A. Thorpe, J. Anderson, A. Kennedy Jr., C. H. Giroux, J. G. Farrar and H. W. Parsons. Space used for reception purposes only.

Great Lakes, Hudson & Atlantic Waterways Association, 268 Pearl Street, New York. Booths 47, 48, 49.

Griscom-Russell Co., 90 West street, New York. Booths 112 and 151. Rep-

Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

resented by Messrs. Robert Colston and A. S. Hoffman. Exhibiting evaporators, distillers, feed water heaters, fuel oil heaters, oil coolers, grease extractors, strainers and steam separators.

Horne Mfg. Co., 243 Mercer street, Jersey City, N. J. Booth 199. Represented by Messrs. L. W. Horne and A. E. Rackliffe. Exhibiting watertight electric fixtures; circuit breakers; running light indicators; fire alarm thermostats; plugs and receptacles, cargo reflectors; mechanical ships telegraphs; voice tube fittings.

H. J. Hush, 36 West Sixtieth street, New York. Booth 21. Represented by Messrs. J. S. McConville, J. Walsh, and H. J. Hush. Exhibiting domestic pumps, engine derricks, arc welding sets, etc., including a complete hoist unit for New York lighterage, domestic double-acting pump, domestic walking beam pump, and 4-cylinder centrifugal pump. Also exhibiting a direct 5-kilowatt lighting set, 40 amperes and 125 volts; three engines, 4-cylinder, heavy duty, 3½, 6 and 12 horsepower, manufactured by the Loane Engineering Co., Baltimore.

International Compositions Co., Inc., 23 Park place, New York. Booth 60. Represented by F. W. Petri. Exhibiting anticorrosive and antifouling compositions and general marine utility paints.

International Mercantile Marine Co., 11 Broadway, New York. Booths 194 and 195. Booth completed with a portable moving picture outfit, giving moving pictures illustrating travel by sea.

T. P. Jarvis Mfg. Co., Knickerbocker Hotel building, New York. Booth 230. Represented by Messrs. Owen O'Beirne, Harry Cunningham, J. E. McCauley and M. Appleman. Exhibiting oil burner systems for ship's galleys.

H. W. Johns-Manville Co., Forty-first street and Madison avenue, New York. Booth 114. Represented by R. F. Massa. Exhibiting asbestos products for ice machines, refrigerating machines, asbestos shingles, roofing, packing and other asbestos products for marine work.

Keasbey & Mattison Co., 217 Broadway, New York. Booth 20. Represented by Messrs. L. L. Barrett and A. Hovey-King. Exhibiting pipe coverings and gaskets and packing, and a general line of asbestos textiles. The exhibit includes a series of steam pipes under pressure with a thermometer applied to the outside of the coverings thereby indicating the efficiency of the respective coverings.

Kingsbury Machine Works, 4320 Tackawanna street, Frankford-Philadelphia. Booths 165 and 178. Represented by Messrs. Albert Kingsbury, Nelson Ogden, Paul F. Murphy, J. Frank Cox. Exhibiting marine thrust bearings, adjustable and equalizing types; testing machine demonstrating the operation; air-lubricated bearing showing complete separation of bearing faces.

Lee & Simmons, Inc., 44 Whitehall street, New York. Booth 12. Represented by David T. Lamond, Chauncey Miller, Ryland Palmer, Ralph O. Wilson and Joseph P. Heuer. Exhibiting models of covered barge, tugboat, steam lighter, steam hoisting lighter and lighter HARDING, launched this year; photographs of the various types of vessels used in the lighterage business of the port of New York.

Lunkenheimer Co., Cincinnati. Booth 149. Represented by Messrs. Walter A. Reynolds, James Cooper, Frank Hyatt, H. Burger, Philip Smith. Exhibiting gate safety and check valves; oil cups; grease cups; lubricators; oiling devices; whistles, cocks; injectors and engineering appliances in general.

Magnesia Association of America, 721 Bulletin building, Philadelphia. Booth 152. Represented by C. J. Stover and G. S. Stuart. Exhibiting 85 per cent magnesia pipe and boiler covering; 85 per cent magnesia blocks and locomotive lagging; 85 per cent magnesia plastic, carbonate of magnesia.

Marine Decking & Supply Co., 116 North Delaware avenue, Philadelphia. Booths 200 and 225. Represented by Messrs. W. L. Peebles and G. W. Selby. Exhibiting decking and flooring; tackle blocks, shackles and sheaves; paints and varnishes; cargo hoister.

Marine Draftsmen Association. Booth 40.

Marine Engineering and Shipping Age, Woolworth building, New York. Booths 204, 205, 221 and 220.

Marine Equipment Manufacturers Association. Booths 35, 36, 37 and 38. Executive offices.

Marine News, 26 Water street, New York. Booth 198.

MARINE REVIEW. Booth 160. Represented by Messrs. A. O. Backert, R. V. Sawhill, F. V. Cole, W. S. Doxsey, V. G Iden, W. B. Price and Joseph Fuller. Space used for reception purposes only.

Mercantile Specialties Co., 11 Broadway, New York City. Booth 61. Represented by H. G. Mullen. Exhibiting a safety porthole.

J. S. Mundy Hoisting Engine Co., 722-740 Frelinghuysen avenue, Newark, N. J. Booth 132. Represented by Messrs. C. L. Mundy, president, and C. H. Foster, marine manager. Exhibiting ash hoists and hand steerers. An ash hoist is connected up with a motor compressor set for furnishing power to operate the hoist, thus showing the operation of the automatic control gear.

National Malleable Castings Co., Cleveland, with offices at 30 Church street, New York. Booth 161. Represented by Messrs. Benjamin Neilds Jr., Walter C. Lewis and Lloyd Snyder. Exhibiting various sizes of cast chain, shackles, swivels, etc.

National Marine League. Booths 188, 187 and 186.

Newport News Shipbuilding & Dry Dock Co., Newport News, Va. Booths 123, 124, 139 and 140. Represented by J. Philip Kiesecker. Exhibiting pictures and literature bearing on the harbor facilities of Hampton Roads, including views taken by the army air service, also photographs of the bombing of old war craft of the German and American navies. The gallery for the pictures is arranged in the form of a cabin. The whole booth shows a full sized after bridge of a ship, with cabin and open deck space with usual hand-rails.

New Process Chemical Co., 114 Liberty street, New York. Booth 233. Represented by Messrs. A. Schlueter, W. Gutterson and L. Strawser. Exhibiting marine glue and ship paints.

Northern Fire Apparatus Co., Minneapolis. Booth 228. Represented by John A. Hense. Exhibiting rotary oil pumps.

Albert T. Otto & Sons, Inc., 101 Park avenue, New York. Booth 155. Represented by Messrs. Stuart Otto and P. G. Schilling. The space is given over to a reception room, and to exhibiting diesel engines and air compressors by drawings and photographs.

Pantasote Co., 11 Broadway, New York. Booths 162 and 181. Represented by H. G. Lake. Exhibiting its products, made into bulkheads, flooring, and roofing. The exhibit includes a model ship's cabin.

Peabody Engineering Corp., 331 Madison avenue, New York. Booth 154. Represented by Messrs. W. A. Ebsen and J. P. Leask. Exhibiting a wide range mechanical atomizer, spraying water, instead of fuel oil, into a glass box. The burner is connected to a pump, delivering water under a constant pressure, and a bypass valve on the return line, which controls the quantity of fluid delivered at the burner tip, is located at a convenient point near the booth rail, so that it may be operated by visitors to the booth. As this burner is designed to be extremely flexible and to give perfect atomization at all rates between full load and 15 per cent of the full

Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

load, this visible spray gives a striking example of the burner's range of capacity. A complete burner and register is mounted on a plate, similar to the front plate of a boiler and the burner is connected to piping which is similar to an actual boiler installation.

Pneumercator Co., Inc., 15 Park Row, New York. Booth 14. Represented by Messrs. Gardner Cornett and Harry S. Parks. Exhibiting ship's draft gage; tank gages; electric whistle operator.

Power Specialty Co., 111 Broadway, New York. Booth 153. Represented by Messrs. J. J. Nelis, J. C. McKenzie and F. Glader. Exhibiting a complete superheater element with core and method of closing hand hole openings in header. Distributing literature describing the company's superheaters.

Pyle-National Co., 30 Church street, New York. Booth 145. Represented by Messrs. J. D. Sarles, Carl S. Geis, J. L. Reese and Chas. G. LeFevre. Exhibiting turbines, turbo-generators, searchlights and fans.

Row & Davis, Engineers, Inc., 90 West street, New York. Booths 73 and 104. Represented by Messrs. H. C. Davis, R. R. Row and P. R. Kopf. Exhibiting a power coil evaporator, with coils attached to a hinged door; power coil feed-water heater, and improved power coil feed water heater, with coil joints so arranged that on removal of the door all joints are accessible; power coil improved oil heater and cooler with external joints, and grease extractor.

Scovill Mfg. Co., 280 Broadway, New York. Booth 111. Represented by Messrs. P. Davidson, C. A. Gleason, and E. H. Callanah. Exhibiting brass products. Special attention is called to the admiralty mixture condenser tubing.

Shepard Electric Crane & Hoist Co., Montour Falls, N. Y. Booth 126. Represented by Messrs. A. J. Barnes and G. G. Habbershaw. Exhibiting a ½-ton direct lift hoist and a 1-ton direct lift hoist.

Society of Naval Architects and Marine Engineers. Booth 39.

Sperry Gyroscope Co., Manhattan Bridge Plaza, Brooklyn, N. Y. Booth 15. Represented by Messrs. Robert B. Lea, O. B. Whitaker, J. R. Conover, C. D. Jobson and H. A. McDonell. Exhibiting a gyro compass, an actual equipment being in operation together with one of the company's new continuous course recorders in connection with an electric log. A number of recording compass records are on display, taken from vessels throughout the world equipped with the gyro compass. A model of a stabilizer building for an 18,000-ton passenger liner is in operation and records from several equipments installed this year likewise are on display. As a special feature of the exhibit is shown one of the company's new electric clutches, shown in operation, which is declared to be the first true magnetic clutch coupling for commercial purposes.

Stamford Foundry Co., Stamford, Conn. Booth 226. Represented by Frank W. Brant. Exhibiting ranges.

GENERAL VIEW OF EXHIBITION FLOOR JUST BEFORE THE SHOW STARTED

B. F. Sturtevant Co., Hyde Park, Boston. Booths 94 and 95. Represented by Messrs. Eugene B. Williams and Edward L. Moran. Exhibiting battleship and scout cruiser forced draft units; 5-kilowatt gasoline engine generating set; 9 x 8-inch vertical steam engine; turbine for auxiliary pump drive; portable ventilating set.

Sun Shipbuilding Co., Chester, Pa. Booths 76, 77, 100 and 101. Represented by Messrs. J. T. Borden and J. W. Hudson. Exhibiting photographs and models.

Superheater Co., 17 East Forty-second street, New York. Booths 156 and 157. Represented by Messrs. George C. Fuller, Adolph Starr, George E. Kershaw, Walter L. Lovekin, H.

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

B. Oatley, John E. Moore and W. E. McLintock. Exhibiting a model of a fire tube superheater as applied to the Scotch marine type of boiler, a model of the company's superheater as applied to marine water tube boilers and boilers used on river boats, a steam pyrometer for measuring steam temperatures, and a boiler feed pump.

E. V. Sutliff, 30 Church street, New York. Displaying a marine encyclopedia.

Texas Co., 17 Battery place, New York. Booth 105. Represented by Messrs. Frank J. Shipman, D. P. Quinn, J. L. Ward, H. W. Salbador, A. St. James, W. W. Hoopes, H W. Schilling, E. A. Lobb, and L. O'Malley. Exhibiting samples of marine lubricants.

P. S. Thorsen Co., 81 Coffey street, Brooklyn, N. Y. Booth 113. Represented by Messrs. A. Wood, R. S. Warner and P. S. Thorsen. Exhibiting heat and cold insulations.

W. & J. Tiebout, 118 Chambers street, New York. Booth 114. Represented by John Tiebout Jr. Exhibiting brass and galvanized ship hardware.

Todd Shipyards Corp., 25 Broadway, New York City. Booths 119, 120, 143 and 144. Represented by Messrs. William H. Raab and H. Nightengale. Exhibiting the drydocking of an ocean liner, models having been executed by the craftsmen of the Erie Basin plant of the Robins Dry Dock & Repair Co., of a modern ocean liner and the big 6-section floating drydock, known as No. 4 in the Robins yard. The model dock measures 11 feet 6 inches overall, built in six sections and fitted with outriggers. The equipment of the dock is complete in every detail, and the miniature steamship has three funnels, twin screws, 22 lifeboats and a full equipment. The exhibits of the Tietjen & Lang Co., Hoboken, N. J., and the Tebo Yacht Basin Co., Brooklyn, include scale models of a 750-horsepower diesel marine type engine with electric drive, 13 feet in length and a turbine with gearing in position in the engine room of a steamship. There is also a model of an oil-burning fruit and passenger liner, two of which were recently launched at the Tebo plant. The model measures 12 feet overall. The White Fuel Oil Engineering Corp., another Todd subsidiary, which is patentee and manufacturer of systems of oil burning, shows a section of an oil-fired Scotch boiler and also the latest improvements in oil burning equipment, including its new burner. This company has supplied nearly 700 oil burnings sets for installation on ocean steamers.

United States navy, Washington, Booths 1, 2, 3, 4, 5, 6, 7, 8, 66, 67, 68, 69, 70, 108 and 110. Exhibits in charge of Michael D. Schaefer. Exhibits listed are as follows: *Construction and repair*: Submarine HOLLAND, submarine S-1, submarine S-2, submarine S-3, MIANTONOMAH, CHEYENNE, VERMONT (old), VERMONT (new), SOUTH CAROLINA, OKLAHOMA, PENNSYLVANIA, SHUBRICK and DECATUR, destroyer SAMPSON. *Bureau of Navigation*: Paintings of heroic deeds, citations, photos showing recreational, athletic, educational and hygiene work; map of third naval district, showing piloting cable, radio station, etc. *Marine Corps*: Lewis machine gun complete; Browning machine gun, complete; Colt machine gun, complete; trumpets. *Bureau of Aeronautics*: Liberty motor and propellers.

United States Shipping Board, Washington. Booths 54, 55, 56 and 57. Exhibiting a model of one of the new combination "535" ships, made to 1/5 actual size. Also exhibiting a model stateroom aboard a government passenger ship. Exhibit in charge of W. W. Harrison.

Valentine & Co., 456 Fourth avenue, New York. Booths 64 and 65. Represented by Dorning Walker. Exhibiting a large running water machine, consisting of panels finished with the company's and a number of competitive varnishes over each of which a stream of hot water flows. The object of this is to show that water will not affect the company's varnish. A second display is designed to bring out this same quality of the varnish. A washing machine is used with a glass front so that the visitor is able to see a panel, which is made up in the form of a submarine. Soapy water continually dashes against the varnished submarine. Another display is a table top stained in strips with the company's varnish mahogany stain and a number of competitive stains. Boiling water is poured down over the table top in a continual stream from a kettle in which the water is heated by an electric heater. In addition to these three main displays, are shown panels finished in varnish, enamels, and varnish stains produced by the company.

Victor Engineering Co., Philadelphia, Booth 191. Represented by Messrs. Eugene Hahn and C. L. Bachman. Exhibiting its ash-ejector, an ejector which works without a pump, as it is operated by a specially designed steam nozzle, which is designed to reduce the loss of steam to a negligible minimum. The absence of a pump, and consequently water, is said to make flooding of boiler room impossible and to do away with any troubles incident to such equipment. Demonstrations are made showing how the different operations of turning on the steam, eliminating the dust, opening of sea-gate, uncovering of ash-hopper, are combined in one single stroke. To reverse all the above operations, a single stroke only is necessary.

Wager Furnace Bridge Wall Co., Inc., Singer building, New York. Booth 117. Represented by Messrs. Louis F. Fenwick and Alexander Halley. Exhibiting patent bridge wall for Scotch marine and watertube boilers.

Elisha Webb & Son Co., Philadelphia. Booth 59. Represented by Elisha Webb. Exhibiting ranges and galley equipment, lights, steam tables, etc.

Western Union Telegraph Co. Booth 45.

Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa. Booths 78, 79, 98, 99, 80 and 97. Represented by W. H. Easton. Exhibiting models of modern ship propelling machinery, such as turbine gears and diesel-electric equipment, together with a large number of photographs showing interesting applications of steam and electric apparatus on board ship and in shipyards. A moving picture of the manufacture of marine machinery, together with some dramatic scenes of the trials of the battleship TENNESSEE, the destroyer BROOKS and other ships, is on exhibition. A novel feature of the display is a wireless receiving set with a loud-speaking attachment which transmits marine news, concerts and other messages from the company's high-powered radio broadcasting station at Newark, N. J.

C. H. Wheeler Mfg. Co., Philadelphia. Booth 13. Represented by Messrs. C. H. Lang, M. J. Mullan, and J. Dobson. Exhibiting single stage air pumps; double stage; intercondenser; navy type condenser pumps; dynamometers for testing diesel engines; also accessories to these.

D. T. Williams Valve Co., Cincinnati. Booth 106. Represented by H. J. Frincke. Exhibiting valves and steam specialties.

C. A. Woolsey Paint & Color Co., Jersey City, N. J. Booth 62. Represented by Messrs. Percy Varley and E. D. Kelly. Exhibiting copper paints, marine paint specialties, and spar varnish.

Worthington Pump & Machinery Corp., 115 Broadway, New York City. Booth 146. Represented by Messrs. W. A. Cather, M. L. Katzenstein, C. H. Hills, I. W. Jackman, J. J. Morch and B. L. Knowles. Exhibiting several types of centrifugal pumps, notably the boiler feed pumps of various general designs, such as are being considered by naval and merchant engineers today. Also showing vertical simplex boiler feed and general service pumps.

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

U.S. Classification Bureau Grows

American Society Now Gives Support to Marine Industry Essential for Latter's Progress

BY W. A. DOBSON

CLASSIFICATION of vessels built for the merchant marine is fundamentally a matter of national importance. This view is justified by the fact that the certificate of class issued by a registration society is a guarantee that the vessel so classed is properly constructed. Such a certificate assures the owner and the insurance underwriter that the strength of the vessel is unquestionable and that its character of construction is in accordance with the standards of the classification society. The enormous risk incidental to an inferior construction is eliminated, and only the hazards common to sea service remain to be considered. The result, therefore, of building to the rules and survey of a classification society, in so far as providing for and obtaining proper construction goes, is the assurance that the lives of those who travel by sea in vessels so constructed, and the vessels themselves with their cargoes are to that extent safeguarded. Life and property, so safeguarded, become a part of the nation's assets.

What Classification Means

The purpose of any society for the registration of vessels is to classify them in accordance with their strength and seaworthiness, with proper regard on the one hand, for the safety of life and property, and, on the other, to obtain the necessary strength and seagoing qualities without impairing the earning power of the vessel by carrying around for its lifetime an unnecessary weight of structure that reduces the cargo-carrying capacity. Among other responsibilities, a moral obligation rests upon the classification society, as representing the owners, to use every endeavor to prevent the incorporation of unnecessary weight, thereby assuring a vessel of the maximum earning capacity combined with a satisfactory strength.

With the introduction of iron as a building material, it became practicable to consider the hull proper as a girder and closely to approximate the stresses brought upon a vessel floating in a highly disturbed medium. The art of arranging the scantling for safely meeting such stresses became the study of naval architects of all nations, and while new combinations are constantly being developed, the general principles involved are well known and carefully considered in any standard arrangement of scantlings. As a result of such investigations, combined with many years of sea-experience, tables or rules have been prepared by the classification societies which insure that vessels built in accordance therewith will have the required strength successfully to meet the varying conditions of ocean traffic. It is to be noted that such rules are not on a purely academic basis but are the result of mathematical investigation applied to sea experience with all types of construction, wherein stresses are kept within well defined limits.

The salient features of such rules were well known to the framers of the merchant marine act of 1920. This act provides for the classification of vessels, other than military, owned by the United States, and for such other purposes in connection therewith as are the proper functions of a classification bureau. The act directs that all departments, boards, bureaus and commissions of the government recognize the American Bureau of Shipping as their agency, so long as that bureau continues to be maintained as an organization which has no capital stock and pays no dividends. This being the case, it is deemed proper and opportune to review the history of the only existing American classification society and to show its growth and present condition.

On April 22, 1862, the legislature of the state of New York incorporated the American Shipmasters' association, the incorporators being men well known in shipping and maritime insurance. The purposes of the association were those of collecting and disseminating information upon subjects of marine or commercial interest, of encouraging and advancing worthy and well qualified commanders and other officers of vessels in the merchant service, of ascertaining and certifying the qualifications of such persons as applied to be recommended as commanders or officers, and of promoting the security of life and property on the seas.

The last-named purpose necessarily carried with it the preparation and adoption of rules for construction and survey which, when complied with in the construction of a vessel, entitled it to proper classification in the association.

The association continued to function under the title of "The American Shipmasters' association" until the first of November, 1898, when, by order of the supreme court of the state of New York, the association was authorized to assume another corporate name, namely, "The American Bureau of Shipping."

The bureau affairs are administered by representatives of shipping interests in its broadest sense, and although the bureau is incorporated, it has no shares upon which dividends are payable. In other words, it has no capital stock and pays no dividends.

Regains Former Strength

During the period which had elapsed from its original incorporation as the American Shipmasters' association and its continuation as the American Bureau of Shipping, the work of classification had been chiefly confined to American built coastwise vessels. At one time, the shipping interests of the United States under federal aid, in the shape of wise legislation and encouragement, had assumed large proportions, but upon the withdrawal of such aid, and acquiescence with treaties decidedly favorable to foreign shipping, these interests gradually declined. This shrinkage, resulting in the relatively small amount of merchant shipbuilding done here, combined with the lack of vision on the part of the bureau in not making alliances outside of this country, caused its power and influence to parallel the downward tendency of American shipping. In the meantime foreign classification societies, from large and extended experience, had so built up their staffs of advisers and surveyors, had so revised their rules and broadened their activities in all phases relating to building, insuring and salvaging vessels, that the American shipowners found their interests best served by building under foreign classification rules. This tendency became so pronounced that, prior to the shipping board assuming control of the building facilities of this country, 96 per cent of the United States seagoing vessels was built under the rules of foreign classification societies. Therefore, in 1915, the American bureau found it necessary to reorganize and to consider the advisability of making connection

Read at twenty-ninth general meeting of the Society of Naval Architects and Marine Engineers, New York, Nov. 17-18. The author, W. A. Dobson, is vice president of the society.

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

with a foreign registration society in order to enlarge its operations and usefulness.

Before entering further upon the history of the bureau, it may be well to allude briefly to some of the causes of the decline of American shipping and its reaction upon shipbuilding.

Decline of American Shipping

First and foremost of the reasons was the withdrawal of the discriminatory duties enforced by the government in favor of American bottoms. This legislation had been so instrumental in building up the American marine that at one period American vessels carried by far the larger part of the world's commerce. Another cause of the downfall of the American merchant marine was the entering into of treaties which to say the least, placed American shipping at a decided disadvantage with the carriers of other nations. The result was that little interest was taken by congress in furthering the interests of the shipping of the United States from before the Civil war until the beginning of the Great war, the only aid extended being in the shape of mail-carrying subsidies. The shipbuilding interests naturally followed the decline in shipping. The good effect of discriminating duties in the past may well be closely studied in connection with the enforcement of recent legislation. Another feature was the development in internal transportation facilities which greatly influenced and held in financial subjection the natural development of the United States as a shipping power.

This influence is to be found in the rapid construction of the railway systems of this country. We have a tremendous area whose development depended upon means of communication, one part with the other. This led to the building of great transcontinental railways, as well as lines connecting the northern and southern portions of our country. This and other necessary internal developments absorbed the financial energies of the country, and while vast sums of money were raised and expended in building great railways, shipping, being of greater risk and its future to a great degree dependent upon congressional action, was not looked upon with favor as an investment nor given the consideration its importance demanded, by the financial powers of the country.

By the year 1915, or the second year of the Great war, shipbuilding in the United States becoming much more active, the American Bureau of Shipping, through its board of managers, called a special meeting for the purpose of considering the reorganization of the bureau, of enlarging its usefulness by establishing faithful and accurate classification and register of mercantile shipping, and to aid in developing the merchant marine of the United States.

Looking to this end, a committee of reorganization was appointed at the meeting on Oct. 8, 1915, consisting of P. A. S. Franklin, chairman; Antonio C. Pessano, Walter Wood Parsons, Charles Skentelberry, Harvey D. Goulder, and William A. Dobson.

A number of meetings of this reorganization committee were held in the latter part of 1915 and the early part of 1916. At these meetings various maritime matters were discussed, including the renewal of negotiations contemplating an amalgamation of the bureau with Lloyd's Register of Shipping, as well as one with the Great Lakes Register. Ultimately it was determined not to make the contemplated arrangement with Lloyd's but to continue the American Bureau of Shipping as a vital force in American shipping, it being the judgment of the committee that such course would be for the best interest of American shipowners, builders and underwriters, and from the fact that people in this country began to have a belated sense of national pride in the affairs of the merchant marine which called for the classification of American vessels by an American society and for the insurance of American vessels and cargo, by Americans for the benefit of America.

At the meeting Jan. 13, 1916, Stevenson Taylor was invited to attend, and on the following day he was made chairman of the reorganization committee at the request of Chairman Franklin, who resigned the office for that purpose.

Government Aids Bureau

Advance in connection with American shipping developed very rapidly from that date on, and congressional action, taken in connection with vessels owned by the United States, made it absolutely necessary that there should be an American bureau of classification, recognized as the authority for the proper classification of its vessels. It can be seen clearly that no foreign classification society, or an American committee of a foreign classification society, could be accepted as an authority under which the interests of the American government could be properly served. The recognition by congress of the American Bureau of Shipping as the American authority placed it at once in an official position for the classification of government vessels and established it as a body capable of advising on kindred subjects; to this end matters such as the determination of load line and freeboard were referred by the government to the bureau for advice and co-operation in considering legislation for a government load line for American vessels. It thus became necessary for the bureau to come at once into the field so largely occupied by foreign classification societies, fully equipped to assume the requirements and duties of an American classification society.

It must be recognized that the bureau had to contend with foreign registration societies, some over a century and a half old, whose growth had been marked by affiliation with insurance and salvaging companies which gave them a commanding position in maritime affairs. It must also be recognized that but five years had elapsed since the American Bureau of Shipping began to strengthen its forces and affiliations and to make a faithful and accurate classification of vessels and registry of mercantile shipping contributory to the development of the merchant marine of the United States.

The record as now compiled is a compendium of the general characteristics of the vessels admitted, in which are given the vessel's name and official number; the signal letters; the material of which the vessel in constructed; the number of bulkheads and decks; whether vessel is built with water bottom or not; whether fitted with wireless outfit and submarine signal apparatus; the hailing port; the registered dimensions; the gross and net tonnage; when built, and by whom; the owners; the particulars of engines, boilers and propellers and the class the vessel is given; so that by referring to the record the general information concerning any vessel is at once obtainable.

In this country alone is to be found a chain of great cities located on interconnecting inland seas of fresh water, where vessels up to 600 feet and over in length are common carriers. Seasonal storms of great violence occur throughout the area of the Great Lakes, but the waves, while steeper than ocean waves, are not as long. Therefore, the stresses on the main structure are not as severe, but weather deck structure and fittings are required to withstand the pounding effect of seas breaking on deck. A type of lake structure has thus developed that requires special treatment by the rules of a classification society.

To meet these requirements, the Great Lakes Register was purchased in 1916 from its owners and incorporated with the bureau as the Great Lakes department.

In the year 1917 the bureau was convinced that the rules adopted by the British Corp., for the survey and registration of shipping were the most scientific of the rules in force for the construction of steel vessels, and after

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

conference with this corporation an alliance was made whereby the British Corp., represents the bureau in the United Kingdom, and the bureau represents the corporation in the United States, on terms mutually satisfactory.

Following this alliance in 1917, one of the same nature was made with the Registro Navale Italiano, and in 1920 one with the Imperial Japanese Marine Corp. Fred F. Perris, long with the British Corp., serves as technical adviser of the Japanese corporation. Prince Higasji Fushimi is honorary president, and Dr. Seichi Terano, of the Engineering college, Imperial university, Tokio, is vice chairman. The head offices are in Tokio, and surveyors will be established in Yokohama, Kobe, Nagasaki and Osaka.

Surveyors Placed Abroad

At the present time it can be said that all these alliances have been very satisfactory. During the past year offices and exclusive surveyors have been placed in Hamburg, Antwerp, Harve, Brest, Bordeaux, Rio de Janeiro, Buenos Aires and Valparaiso, and additional nonexclusive surveyors in Spain, Portugal and all important Mediterranean ports, including Constantinople.

The following table shows that for the past five years, or from 1916 to 1920, inclusive, the service furnished by the bureau has grown in importance and has proved worthy of the confidence of the government and of shipowners as well as underwriters:

	1916	1917	1918	1919	1920
Number of ships classed	194	262	218	898	514
Gross tonnage classed	228,539	550,285	535,232	3,030,962	1,918,007
Number of surveys made	572	780	795	1,729	4,122
Number of executive officers	2	3	3	5	5
Number of office employes	8	15	35	58	43
Number of surveyors (exclusive)	8	69	176	179	138
Number of offices	3	12	19	21	25

The registration of American vessels by an American society has been considered so important that the Atlantic Coast Shipbuilders' association, representing all the shipyards on the Atlantic coast appointed a committee to co-operate with the American Bureau of Shipping in extending its efficiency in every way possible.

The bureau is working in full harmony with the shipbuilders of this country and is rapidly gaining the confidence of shipowners, builders and underwriters.

One of the most important features of a classification society is that its surveyors shall be men in whom the shipowner, the shipbuilder and underwriter have confidence as to their experience, judgment and technical knowledge. From the above report it is apparent that the bureau, by the process of selection and elimination, is acquiring a staff with the desired qualifications.

The technical committee of the bureau is headed by no less an authority on hull construction than Admiral D. W. Taylor, U. S. N. a recognized leader on matters of construction and design. There is much to be accomplished by the bureau in strengthening its forces and making affiliations for appraisal of damages and salvaging, but the record of the past five years argues well that these matters will be fully and ably dealt with. It has been well said by Walter B. Norris that "though the western frontier is gone, and with the historic incitements of democratic character which it offered, the sea remains with its majesty, its independence and its call to imagination and courage, to keep alive the democracy and idealism which it helped to create in the typical American."

The typical American is returning to love of the sea and the opportunities it affords for advancement and accumulation of wealth. The American Bureau of Shipping has awakened to its opportunities and is strengthening its forces and enlarging its borders to meet the revival of interest in the merchant marine of the United States.

There can be no doubt that it is the patriotic duty of American shipowners, underwriters and builders to aid and encourage the bureau in its efforts to build up an organization which, with its affiliations, shall be second to none in the world in the service rendered in classing, surveying, appraising, underwriting and salvaging vessels owned by the shipping interests of this country. If we are to have a prosperous growing merchant marine, we must also have an American classification society, capable of rendering aid of the best class to every phase of the shipping industry.

In order to afford relief to the unemployment situation, the California board of state harbor commissioners, will commence work at once on harbor improvements at San Francisco, involving an outlay of more than $2,500,000. The work will employ about 500 men. The projects to be undertaken are the improvement of the China basin, the relaying of girder rails for the reconstruction between Lombard and Bay streets, the construction of reinforced concrete bulkheads between piers 17 and 25, contracts for which have been awarded; and the construction of a bulkhead shed in front of Pier No. 5, contract for which also has been let.

Armes Heads New Plant on Pacific Coast

The Pacific coast is to have a large new shipbuilding plant, located at San Francisco, according to announcement by George A. Armes, one of the best known shipbuilders on the coast, who recently resigned as general manager of the Moore Shipbuilding Co., Oakland, Cal. Mr. Armes announced he has completed arrangements by which he becomes president of the new shipbuilding and ship repair plant. Associated with him in the undertaking are John Mooney, superintendent of construction at the Skinner & Eddy Shipbuilding Co.'s yard at Seattle, during the war, who will be the general manager; and James Young, former assistant to the president of the Skinner & Eddy company, who becomes secretary-treasurer of the new corporation.

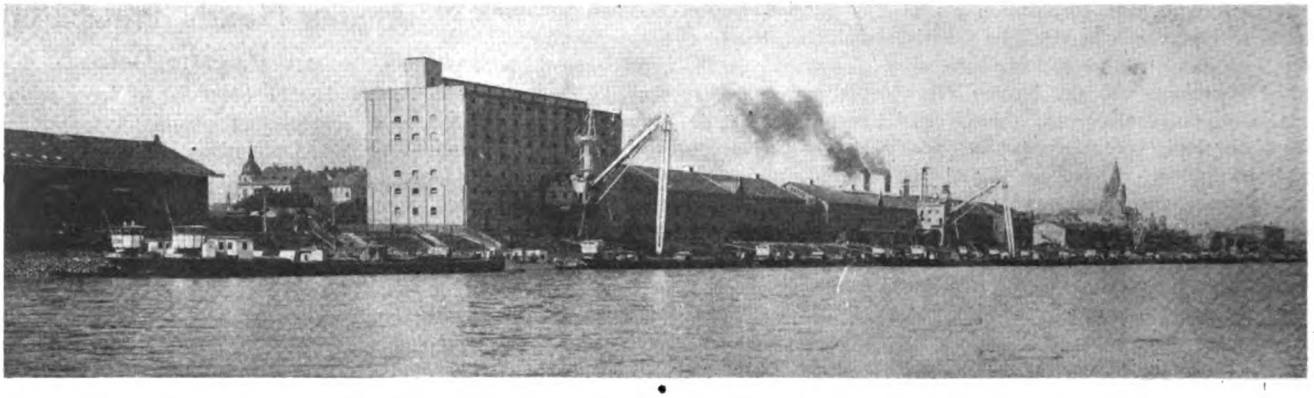
The site of the new yard is at the lower end of Battery street, San Francisco, the plant including the Muir & Simons Machine Works, which will furnish the nucleus of the machine shops of the ship plant. The main occupation of the new yard will be ship repair, since there is little building at present, but ample room for ways has been obtained, to provide for the construction of hulls when they again come into demand. Prior to his connection with the Moore Shipbuilding Co. at whose yard he directed the construction of ships turned out from 1918 to 1921, Mr. Armes was engineer-in-chief at the Union Iron Works for 15 years. This is the San Francisco plant of the Bethlehem Shipbuilding Corp.

The firm will be the General Engineering Co. It was formerly Mooney & Young Co., and recently took over the holdings of the Triangle Engineering Co., installing the equipment of the latter in the plant of the General Engineering Co., which has been enlarged considerably to accommodate the new machinery.

The second annual meeting of the International chamber of commerce will be held in Rome, during the week of Sept. 18, 1922. Among the numerous subjects which are to be studied by the international committees are: uniformity of ships' tonnage measurement, combined rail and ship bill of lading, uniform ocean bills of lading, uniform interpretation of meaning of trade terms, and uniform passport regulations.

A new Marine Exchange lookout station is being erected at Point Lobos, Cal., where Capt. Tom Anderson is lookout for the Marine Exchange.

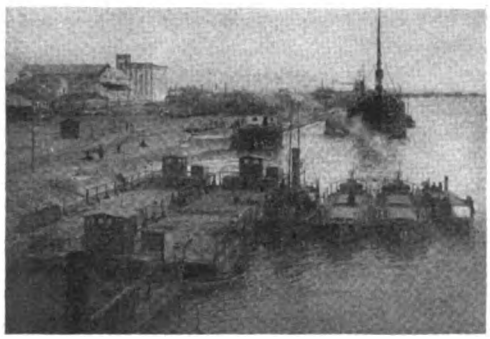
Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



PLANTS OF THE D. S. CO. AT VIENNA PRATERKAI

DOCKING FACILITIES OF THE D. S. CO. AT LINZ

HARBOR AND STORAGE DOCKS AT GALATZ



HARBOR DOCKS AND WARE-HOUSES AT BRAILA

A SHIPYARD AT BUDAPEST; PROPERTY OF THE D. S. CO.

FLOATING DRYDOCK OF ALTOFEN, BUDAPEST

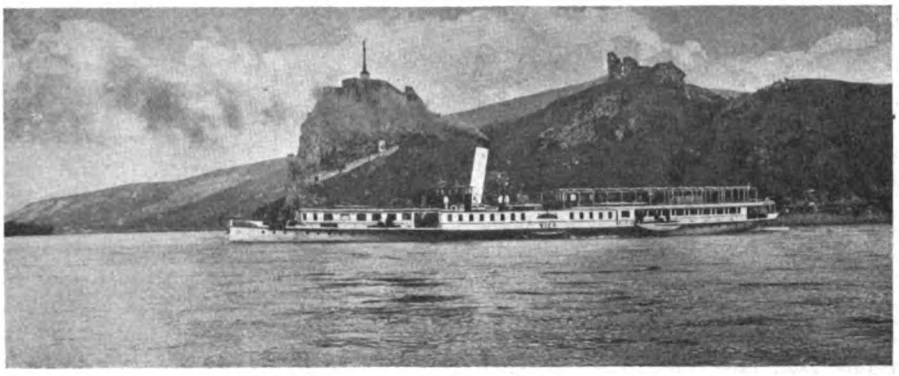
Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Danube Is Real Waterway Puzzle

Historic River Has Been International Bone of Contention for Centuries — Latest Seizures Approved

Special European Correspondence

DECISION of Walker D. Hines, former director general of the United States railroad administration, in the question of shipping on the Danube river, has brought out the importance of that river in the development of the commerce of Europe. Mr. Hines' decision, made as arbitrator for the international questions arising in connection with the river fleets mentioned in the Versailles treaty, affects only the Danube, reservation being made for a decision later as applied to the other rivers.

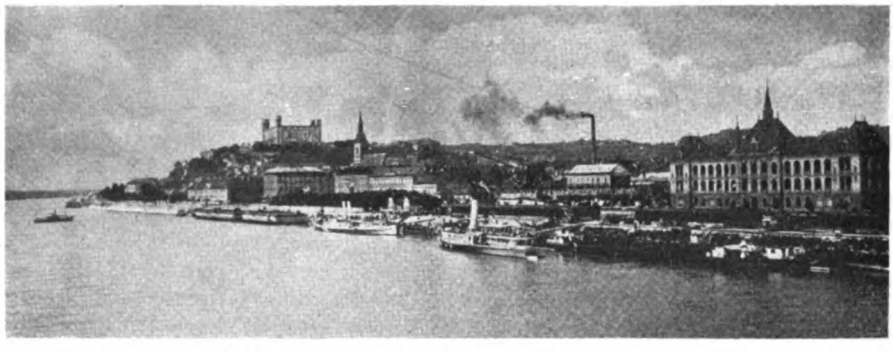


PASSENGER BOAT WIEN ON THE DANUBE

Mr. Hines decided, among other things, that nearly all the Danube fleet seized by Serbia, Roumania and France had been confiscated validly. They were taken immediately after the war and included 155 vessels, 609,000 tons of barges and tugs of 48,000 horsepower. They had been used for war purposes, although privately owned. A few vessels actually privately employed, were ordered returned to their owners. All had been in service on the Danube. The Danube is Europe's largest river, is of 817,000 square kilometers and unites the Alpine and the Karst countries with the Eastern Sudetioan territory and the Carpathian group of countries. It thus assembles into a geographical unit a number of territories widely differing both in character of landscape and in their culture The Danube, with a total length of 2900 kilometers, flows through seven border states part of which still are struggling for economical and political consolidation.

Plans for developing the Danube into a great inland navigation system leading from the Atlantic to the ports on the Black Sea, across the heart of Europe, date back for centuries. In spite of the efforts of judicious statesmen it has been impossible to establish a central and uniform administration of the entire river. Diverging opinions of the different states as to the functions of the Danube have been reflected in the political negotiations on the administration of the river in the past century. The Danube Navigation Act of 1857, which was promoted by a commission of the border states, never was enforced.

For the regulation of the river bed large sums have been spent both in prewar times and during the war, the expenses being, in Germany $5,000,000; in Austria, $34,000,000, and in Hungary, $50,000,000. The international Danube commission, residing in Galatz, Roumania, had spent up to the year 1911, about $77,000,000 on work done in the estuary of the river. The sums were divided between hydrographical surveying, studies and traffic service. The outcome of this commission's work is the navigation channel, of 6 meters depth, leading from the Black sea to Sulina, which in 1856 was but 2.40 meters deep. Vessels of up to 4000 tons may pass. In spite of the large sums spent, the Danube traffic in the past kept within very narrow limits. Of the navigable course of about 2500 kilometers, the entire traffic hardly reached 15,000,000 tons annually.



DANUBE EMBANKMENT AT PRESSBURG

For the present, as well as for the near future it may safely be said that the inland traffic will be of importance for the Danube, especially when a network of canals such as is actually under consideration will economically attach further territories to the river system. Though the part of the Danube as a road of world traffic still may be judged with some reserve, there is no doubt but it is of the utmost importance for water-carriage in Central Europe as soon as adequate developments will bring it up to modern requirements. In the past, the particularism of the border states as well as the fact of initiative being left with the single states have been a hindrance to the development of Danube traffic. The peace treaty aimed to remove this hindrance, and to establish the Danube in the position for which it seems predestined by nature, but from which so far has been withheld.

However, it only deals with the judicial side of the Danube question, setting forth the basic principles which are to govern all states concerned in the aim of developing and promoting Danube traffic.

The fate of the Austrian Danube navigation lay, therefore, with Walker D. Hines, the umpire appointed by the

Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Danube River Fleets Before the War

Name of enterprise or company	Steamers: Tugs	Steamers: Passenger	Steamers: Total	Horse power	Tugs: Motor driven	Tugs: From iron	Tugs: From wood	Tugs: Total	Tonnage
Erste Donau-Dampfschiffahrts-Gesellschaft	98	47	145	64,300	1	852	..	853	480,000
Ungar. Fluu. Seeschiffahrts-Gesellschaft	52	22	74	32,800	.	389	5	394	218,000
Suddeutsche Dampfschiffahrts-Ges.	11	..	11	6,260	5	110	..	115	77,800
Ungar. Binnenschiffahrt-Aktienges	13	1	14	4,900	.	65	33	98	56,000
Bayrischer Lloyd	4	..	4	2,300	3	40	..	43	28,200
Budapester Propeller Ueberfuhr-Ges.	..	13	13	730	.	..	..	..	.....
Franzens-Kanal	5	..	5	450	.	..	..	..	.....
Hungarian authorities.	13	..	13	2,500	.	22	80	102	20,000
Austrian authorities	5	..	5	11,400	.	3	61	64	5,450
Sundries	29	13	42	5,580	.	83	340	423	86,700
Roumanian state river vessels	54	..	54	12,363	.	133	..	133	36,530
Roumanian private companies	48	..	48	2,940	.	134	120	254	116,300
Total	332	96	428	137,160	9	1831	639	2479	1,125,774

United States. Late in July 1920, three sittings were held in Vienna in which the states concerned were represented, and where Mr. Hines presided. In these sittings the procedure of the arbitrage was laid down. Statistical material from prewar time, but also the actual facts and figures relating to the transport needs of the various states first had to be collected. When distributing the final tonnage, account was to be taken of the amount of work which may have been done by the single states for the promotion of Danube traffic, and for the regulation of the Danube. The arbiter opened a number of offices in Vienna and the material relating to the rivers Oder and Elbe was submitted directly to him by parties concerned.

Uncertainty prevailing as to the rights of property on the fleets of vessels of the single states resulted for its first consequence that almost nothing in the way of an international Danube traffic has so far been called into life. The ships of the single companies are making their journeys within the boundaries of their respective countries only. To put an end to this intolerable state of affairs it has been agreed, with the consent of the entente, to let the ships travel under neutral flag, and to establish international port authorities. This was done early in 1920. Since then a scant traffic has developed, which, however, lacks the invigorating impulse of free and unhampered competition.

To arrive at an exact judgment of Danube traffic it is necessary to go back to prewar figures and data, as only these afford reliable bases for accurate survey. The most important Danube ports of Bavaria are Regensburg and Passau. From a total traffic on all Bavarian waterways of 2,190,927 tons in 1914, the share of the Main river was 732,316 tons. This would tend to show the Danube is actually less efficient in its Bavarian part. Only between Regensburg and Passau and on down the river, regular navigation exists.

During the last years before the war, the Austrian Danube showed a steadily increasing traffic. Between 1902 and 1913, a total of 20,200,598 tons were transported on the Danube. In 1902, traffic amounted to 1,425,590 tons and in 1912 2,562,865 tons, an increase of 79 per cent. From 1910 to 1912 was registered the peak of Danube traffic.

For the sake of comparison it may be stated the total traffic on the Rhine amounted to nearly 105,000,000 tons in 1913.

Traffic on the Danube, examined from the kinds of goods, offers a valuable help for the judgment of the economical importance of the water road of the Danube. Whereas formerly the traffic up the river chiefly served for the transport of corn, recently maize and crude oil have come to the front. Transportation of wheat, which formerly had been dominating dropped steadily. Instead of Hungarian wheat, Serbian and Roumanian wheat, as well as barley and millet, were brought in larger quantities to western Danube countries. A large trade was done in timber. On the lower Danube, comparatively large quantities of coal were transported up the river. The petroleum transports from Roumania for the most part went to Germany. In the down-stream traffic, the first rank was held by coal, piece goods, timber, cement, iron and steel and sugar. Up to the last years before the war coal went chiefly to Hungary and the Balkan counties. Further increase in coal transports on the Danube may be expected, as the Balkan countries will henceforth get their supplies of coal from Bohemia and Silesia.

High Levels in Traffic

Country	Tons
Bavaria (1912)	433,000
Austria (1912)	2,590,000
Hungary (1912)	5,093,000
Bulgaria (1911)	669,000
Roumania (1910)	5,837,000
Total	14,622,000

City	Tons
Regensburg	243,000
Passau	139,000
Linz	154,000
Vienna (including transit)	175,000
Budapest (without transit)	3,089,000

Danube Freight Tariffs

In establishing the freight rates many factors had to be taken into account. Among these was the disparity of river conditions. Freight rates are much below railway tariffs for corresponding distances. Owing to the diversity of conditions prevailing in the single parts of the course, the rates could not be built up throughout on the base of kilometrical unit charges, but had to be specially established for each part. The freight traffic was affected, for rapid delivery of goods, by passenger ships, and otherwise, by freight steamers and towed boats.

The duration of a voyage during summer time, for a fully loaded boat of 650 tons amounts, without operating time, to 16 days for the downstream journey and 29 days for the upstream journey.

In the past, sea transports have been considerabl cheaper. Whereas the entire costs of transport from Galatz to Regensburg on the Danube amounted to 18,000 marks ($4288) for the entire boat of 650 tons, that is 2.78 marks

Rates for Loads of 1000 Kilograms

In the sections	Pfennigs per 100 kilograms*: Pig iron 1914	Pig iron 1916	Iron goods 1914	Iron goods 1916	Paper 1914	Paper 1916	Dye goods 1914	Dye goods 1916
Regensburg-Passau	..	..	..	..	..	..	..	..
Regensburg-Linz	46	72	50	72	53	72	53	92
Regensburg-Vienna	51	125	60	125	70	125	70	145
Regensburg-Budapest	82	195	90	195	110	195	110	230
Regensburg-Orsova	187	323	187	323	187	323	272	450
Regensburg-Turn. Magur	192	389	192	389	192	389	305	525
Regensburg-Galatz	164	393	164	393	164	393	220	537

*$1.00 = 420 pfennigs.

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

($0.662) for 100 kilograms, the cost of sea transport from Galatz to Hamburg amounted only to 7800 marks ($1857) equal to 1.20 marks ($0.286) for 100 kilograms. When the Danube water route and the Danube-Elbe canal is completed the cost of sea transport between Hamburg and Galatz will, in all probability, be not much lower than the cost of Danube traffic.

Towing on the Danube

Towing is done on the Danube by free-going steamers exclusively. On the upper part of the river, only paddle steamers and mainly iron barges, are used, in the central part screw steamers and wooden vessels, in the lower part all kinds of freight and sailing boats, and chiefly screw steamers, are employed. The only hauling by cable existing on the Danube is in the canal near the Iron Gate, because of the swift flow of the river. Towing is done here by a cable boat of 600 horsepower capable of towing upstream 16 boats a day. Many difficulties are encountered in the towing business on the Danube, especially in the part above Vienna and on the cataract.

Tug boats of 1000 tons have lately been built. On the lower Danube this type can be utilized to its full capacity as far as Budapest. After the uniform regulation of the Danube and when the Danube-Main-Rhine canal shall have been completed, this type, which is in general use on the Rhine, is also to be adopted as standard type for Danube navigation.

A special kind of Danube vessels is the tank boats serving for the transport of crude oil over sea from Baku and Batum, Russia, as well as from Roumania. The separate loading spaces formed by cross bulkheads are filled with crude oil, the single spaces being interconnected through small expansion tanks designed to receive the volatile gases. Loading and unloading is done by pipe lines.

Sections of the Danube

The general direction of the flow of the Danube is from west to east. It crosses almost the whole of central Europe, passing the most beautiful sceneries of the Alps in Germany and Austria and of the southern Carpathian mountains, irrigating the fertile valleys of Hungary, Jugoslavia and Wallachia and thus forming the most important water route between central Europe and the Orient. Three different sections may be distinguished on the river Danube:

1—The upper Danube from its origin to Deveny, with a total length of 850 kilometers.

2—The middle or central Danube from the western Carpathians to the gap through the southern Carpathians at Orsova, measuring 940 kilometers in length.

3—The lower Danube from Orsova to its mouth into the Black Sea, 920 kilometers.

Canalization Projects

The total length of the Danube system amounts to 7334 kilometers. From this distance the following are navigable for vessels of the Danube boat type: The river Tisba (Theiss) over a length of 694 kilometers, the Drau for 196 kilometers, the Save for 598 kilometers and the Pruth for 321 kilometers. Of navigable canals there are:

	Kilometers
Ludwig canal in Bavaria.....	61
Danube canal in Vienna.....	17
Bega canal	115
Francis canal	238

Of these canals, only the two last mentioned are navigation for vessels on the Danube.

What the British Are Doing

Short Surveys of Important Activities in Maritime Centers of Island Empire

THE slow but steady growth of coal exports constitutes the most favorable feature of the British shipping situation. General conditions remain unsatisfactory and relatively little progress is being recorded owing to the heavy surplus of tonnage available. In fact, were it not for the coal business, British shipping would be more depressed than ever before in its history. The fuel trade is a life saver.

Coal exports in July, the first month after the strike, were 816,320 tons, increasing to 3,103,207 tons in August and to 3,506,579 tons in September with good opportunity for exports of at least 3,500,000 tons in October. The latter rate is equivalent to more than 40,000,000 tons a year and, although it represents only about 57 per cent of the 1913 business it is not far below the highest annual export rate since the war. Coal freight rates have shown some increase recently particularly to South America. To Buenos Aires, the rate which was 14 shillings in July is now 20 shillings ($3.90) per ton. To west Italy, the current rate is 13s 6d ($2.63); to nearby French ports 7s 9d ($1.50) and to Scandinavia 9 shillings ($1.75).

Considerable stir was aroused in British circles by the announcement from Washington that the shipping board has offered to lease its idle tonnage to American coal exporters at $1.00 per ton per month on a time charter basis. The lowest British time charter rates at present are 5s 6d ($1.07) but if conditions regarding insurance valuation were favorable, the American rate might be considerably the lower. With reference to these bareboat charters, it is pointed out that at the present time it costs £50 ($195) a day to operate a British collier of about 7000 tons capacity.

* * *

ARMSTRONG Whitworth & Co. Newcastle-on-Tyne, have obtained the contract for converting the Cunard liner BERENGARIA, formerly the IMPERATOR, from coal to oil burning. The BERENGARIA is the third largest ship in the world being 832 feet long with a registered tonnage of 51,969. She has quadruple screws driven by 76,000 horsepower steam turbines. The conversion will take six months.

* * *

THE recrudescence of the Egyptian cotton freight controversy has not served to improve relations with American shipping interests in Great Britain. In England it is believed that eventually a compromise will be worked out by the shipping board interests forcing their way into the Liverpool conference. What British shipping interests seem to object to most is the fact that they are obliged to compete with the United States government rather than with private American shipping interests. The fact that the United States consul general at Alexandria has represented the shipping board has also increased the resentment owing to his diplomatic position. The British point of view is that if governments are to use their consular and diplomatic officers for strictly business negotiations endless complications will

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

ensue and retaliatory methods will be necessary. It is believed in England than the conference lines would meet any freight cuts made by the shipping board.

* * *

THROUGH a joint arrangement between the South Eastern & Chatham railway and the Nord railway of France, regular train-ferry services will soon be established across the English channel for the first time in history so far as commercial activities are concerned, the only previous train-ferry service being that operated by the British army during the war. For the time being, the traffic will be confined to freight trains, the arrangements having been made especially to facilitate the transfer of French fruits, vegetables and flowers direct to London.

* * *

THE annual meeting of the North East Coast Institute of Engineering and Shipbuilding was held at Newcastle-on-Tyne Oct. 14. A feature of the proceedings was the presidential address by Sir William Joseph Noble. Commenting on the fact that before the war Great Britain owned 44½ per cent of the world's tonnage, Sir William said that during the conflict British tonnage decreased by 13½ per cent and that the reduction in the efficiency of the British mercantile marine was a great deal more. Although the United Kingdom steam tonnage is now over 19,250,000 tons gross, or more than in 1914, it is not as efficient as it was before the war, and instead of Great Britain owning 44½ per cent of the world's total steam tonnage, its share today is only 35 per cent.

* * *

ON OCT. 19, Messrs. Swan, Hunter & Wigham Richardson, Ltd., Wallsend, England, launched the KUTSANG, a single screw ship to carry passengers and general cargo and to run in the service of the Indo-China Steam Navigation Co., Hong Kong and London. The KUTSANG has an overall length of 434 feet, molded breadth of 54 feet depth of 31 feet and will carry 7000 tons deadweight on a draft of 25½ feet.

She has a poop, a long bridge amidships, and a full topgallant forecastle. On the boat deck are comfortable quarters for the captain, a smoke room, and a ladies' room. On the bridge deck, on either side of the engine casing, are cabins for the officers and engineers, and forward of the funnel are staterooms for first class passengers and the dining saloon. In the poop is accommodation for the second class passengers and above the stearing-gear house is a hospital and dispensary. The sailors and firemen have their quarters in the forecastle, the petty officers and apprentice boys being housed on the upper deck on either side of the mail and baggage compartments beneath the first class dining saloon. Refrigerating machinery will be installed to keep meat and other perishable provisions in good condition.

In most of the cellular double bottom of the ship, oil fuel can be carried as well as water ballast. The machinery and boilers of the KUTSANG have been built by the Wallsend Slipway & Engineering Co. The main engines are of the 4-cylinder quadruple expansion type. Four single-ended, cylindrical boilers are designed for a working pressure of 220 pounds per square inch under forced draft.

* * *

BRITISH liner companies have reduced freights on general cargo from the United Kingdom to South America and the Far East, the reduction to South America ranging from 5 to 12 shilling ($0.92 to $2.22) and the reductions to the Far East, which apply from Great Britain and the continent to China, Japan and the Straits Settlements, ranging from 5 shillings to 17s 6d ($0.92 to $3.24) per ton. Freight rates on general cargo to the Far East, therefore, now range from 57s 6d to 75 shillings ($10.65 to $13.85) per ton, according to the class of articles carried and the port of destination. This is the second reduction which has been made in two months on rates to the Far East, the previous reduction ranging from 7s 6d to 10 shillings ($1.39 to $1.85) per ton. The recent lowering of rates applies to the rougher classifications of goods rated according to weight including especially iron and steel products.

Expect Early Delivery of Big Liner Homeric

The German builders of the 35,000-ton liner HOMERIC, ex-COLUMBUS, are about ready to make delivery at Danzig and she may be expected to sail for Southampton shortly. The Germans will deliver the ship completed in accordance with her original plans, as provided in the peace treaty, but some time will be necessary after her arrival in England to fit her out as a White Star liner. Her first sailing from Southampton has been tentatively set for Feb. 22.

The HOMERIC is exceeded in size by only five ships, the MAJESTIC, 56,000 tons, LEVIATHAN, 54,000, BERENGARIA, 51,000, OLYMPIC 46,439 and AQUITANIA, 45,647. The HOMERIC is approximately 1000 tons larger than the new French liner PARIS, and 3000 tons larger than the MAURETANIA, which once held the palm for size among the world's great liners.

The HOMERIC is 775 feet long and 83 feet wide. She has twin screws, driven by triple expansion engines of 30,000 horsepower, and is expected to make an average speed of 20 knots. Her passenger capacity is 529 first cabin, 487 second, and 1750 third. Her crew numbers 774. She has 40 large staterooms on the promenade deck, and several suites, including one containing drawing room, breakfast room and two bedrooms, each with bath.

While the ship has all the luxurious equipment now found on the largest liners, such as palm garden and glass enclosed promenade decks, she also has numerous novelties not found on most ships. These include a bathroom in which electric light rays take the place of water; a playroom for children fitted with doll houses, hobby horses and many other delights; a typewriting room, fitted with machines for passengers' use; a shop where travelers' articles and varied novelties will be sold; a covered space for deck games in all weathers, such as tennis, shuffleboard and quoits; open fires in reading, writing, music and smoking rooms; electric heaters in staterooms; electrically operated elevators for passengers, and a special one for baggage; a very complete telephone system, with "central," a photographic dark room, and a novel ventilating system by which ozonized air can be pumped into the various rooms.

For comfort and safety at sea the HOMERIC is equipped with all approved modern devices, including bilge keels to prevent rolling; an elaborate fire-prevention system, including fireproof decks and partitions, and a complete fire-alarm equipment; powerful electric sirens, one being fitted on the forecastle head, to give warnings in fog; electric deep-sea sounding apparatus; submarine bell fog signal system; a gyroscopic nonmagnetic compass; system for Morse signaling, and a complete outfit of watertight bulkheads and doors.

Open New Fruit Service

The Atlantic Fruit Co., 17 Battery place, New York, has opened up a weekly service between New York and Porto Rico with the specially built fruit steamers SAGUA, TANAMO and CANANOVA. According to James A. McNaught, general freight and passenger agent, the new service follows a request from Porto Rican fruit growers who feel that the carriage of their products in specially built and adapted fruit steamers will add to the popularity in American markets of Porto Rican produce.

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Launch New Liner for Canadian Route

The 14,000 ton ANDANIA, the seventh Cunard line steamer built since the war, was successfully launched on the Tyne river, England, Nov. 1. The new steamer is 538 feet long with a beam of 65 feet and a depth of 43 feet. She will have accommodations for 1700 cabin and third-class passengers and is intended for the Cunard's direct service to Quebec and Montreal, which she will help to reinaugurate. During the war, all of the company's steamers on the Canadian route were sunk, and as a consequence the service had to lapse.

The ANDANIA is the third of a series of six vessels which the company is constructing to carry cabin and third-class passengers only. She was preceded into the water by the ANTONIA and AUSONIA and will be followed by the ALAUNIA, AURANIA and ASCANIA. The cabin passengers, in addition to a large dining room, have a reading or drawing room, lounge, smoking room and veranda cafe. An appropriately decorated children's room also is provided. The dining room in the third class is large, and in addition to this three other public rooms for travelers in this class are available.

The ANDANIA, like her six predecessors, is an oil-burner, with a single funnel, thus providing greatly increased space for passenger accommodations above the usually afforded on a ship of her tonnage. Her machinery is of the Parson type of double reduction geared turbines which will give her a speed of 15 knots.

H. G. Runge, Milwaukee, a subscriber to MARINE REVIEW for the past 31 years, wrote on Oct. 28 calling attention to the several accidents which have occurred on that date. These include the wreck of the steamer AMAZON at Grand Haven, Mich., in 1879; the foundering of the steamer W. H. GILCHER near High island, Lake Michigan in 1892, and the wreck of the sidewheeler MUSKEGON, on the Muskegon, Mich., piers in 1919.

San Francisco Surveyors Adopt N. Y. Rules

Ship surveyors of San Francisco, recently adopted, with slight modifications, the rules of the New York marine underwriters in reference to the lining of grain-carrying steamships. The gathering was attended by a dozen surveyors, with Capt. Harvey W. Mills serving as chairman. The rules will be presented to the San Francisco marine underwriters for adoption, and then will be presented to surveyors in the ports of Oregon and Washington for acceptance. The move of the local surveyors was due to unnecessary delays and trouble among surveyors at different ports over the question of proper methods of lining vessels in the grain trade between various Pacific coast ports.

The surveyors also plan to form a permanent association, the better to handle just such questions as this which may arise along other and different lines in the future.

Assigned Shipping Board Vessels

TULSAGAS, 10,200 tons, assigned Columbus Shipping Co. management operation.

LORRAINE CROSS, 7825 tons, assignment Daniel Ripley & Co. managing agent cancelled; assigned Mississippi Shipping Co. managing agent; withdraw division of operations managing caretaker.

SACCARAPPA, 7825 tons, assigned Daniel Ripley & Co. managing agent; withdraw managing agency Mississippi Shipping Co.

WEST IVIS, 8766 tons, assigned Barber Steamship lines managing agent; withdraw managing agency Struthers & Dixon, delivery to be effected at Manila.

EASTERN SAILOR, 10,614 tons, assignment division of operations managing caretaker cancelled; assigned Columbia Pacific Shipping Co. managing agent; withdraw managing agency Williams, Dimond & Co.

EASTPORT, 6695 tons, assigned Susquehanna Steamship Co. managing agent; withdraw division of operations managing caretaker.

EASTERN VICTOR, 8460 tons, assigned S. Sgitcovich & Co. managing agent; withdraw division of operations managing caretaker.

SACO, 7825 tons, assigned Daniel Ripley & Co. managing agent; withdraw division of operations managing caretaker.

WEST O'ROWA, 8388 tons, assigned Struthers & Dixon managing agent.

CORCORAN, 3180 tons, chartered bareboat basis Baltimore & Carolina Steamship Co.; withdraw division of operations managing caretaker.

TUXPANOIL, 10,250 tons, assigned McAllister Bros. management and operation.

HAMER, 9985 tons, assigned Struthers & Dixon management and operation.

DISTRICT OF COLUMBIA, 10,250 tons, assigned Walker & Daly management operation; withdraw division of operations managing caretaker.

WEST CANON, 8584 tons, assigned Pacific Steamship Co. managing agent canceled; assigned United American lines managing agent; withdraw managing agency Struthers & Dixon, delivery to be effected at Manila.

WEST HARTS, 8625 tons, assigned Pacific Steamship Co. managing agent; withdraw division of operations managing caretaker.

EASTERN LEADER, 6247 tons, assigned J. H. Winchester & Co. managing agent; withdraw division of operations managing caretaker.

RAJAH, 3250 tons, chartered bare boat basis W. H. Cowley of New Orleans; sale of steamer to Freneh American line canceled.

NATIRAR, 7400 tons, assigned Moore & McCormack Co., Inc., managing agent.

WEST ELCAJON, 8595 tons, assigned Struthers & Dixon managing agent; withdraw division of operations managing caretaker.

CARENCO, 7825 tons, assignment division of operations managing caretaker canceled; assigned Baltimore Oceanic Steamship Co. managing agent; withdraw managing agency Export Transportation Co.

CARDONIA, 7825 tons, assigned Tampa Inter-Ocean Steamship Co. managing agent; withdraw division of operations managing caretaker.

HOXBAR, 10,387 tons, assigned Walker & Daly management operation; withdraw division of operations managing caretaker.

DELIGHT, 7650 tons, assignment division of operations managing caretaker canceled; assigned Struthers & Dixon managing agent; withdraw managing agency Frank Waterhouse & Co.

ARCHER, 11,773 tons, assigned Barber Steamship lines managing agent; withdraw division of operations managing caretaker.

LIO, 10,300 tons, assigned Columbus Shipping Co. management and operation.

LAKE FERNALDA, 4155 tons, assigned Baltimore Steamship Co. managing agent; withdraw division of operations managing caretaker.

NILE, 9956 tons, assigned Kerr Steamship Co., Inc. managing agent; withdraw division of operations managing caretaker.

DUQUESNE, 9750, assigned Barber Steamship lines managing agent; withdraw managing agency, Green Star Steamship Corp., delivery to be effected in Dutch East Indies at port designated by our Manila representative; instruct Barber DUQUESNE assigned them to complete present voyage only.

HIGHO, 7630, assigned C. D. Mallory & Co. managing agent; withdraw managing agency, Green Star Steamship Corp., delivery to be effected at Naples; instruct Mallory HIGHO assigned them to complete present voyage only.

CONSORT, 5192 tons, assigned J. H. Winchester & Co. managing agent; withdraw division of operations managing caretaker.

ZAREMBO, 7632 tons, assigned C. D. Mallory & Co. managing agent; withdraw managing agency, Green Star Steamship Corp., delivery to be effected at Marseilles; instruct Mallory ZAREMBO assigned them to complete present voyage only.

LORAIN, 9759 tons, assigned Kerr Steamship Co. managing agent; withdraw managing agency, Green Star Steamship Corp., delivery to be effected at Port Said; instruct Kerr LORAIN assigned them to complete present voyage only.

WORCESTER, 8827 tons, assigned Rogers & Webb, managing agent for one voyage only; withdraw division of operations managing caretaker.

WEST CORUM, 8635 tons, assigned Munson Steamship line managing agent; withdraw division of operations managing caretaker.

LAKE FLOURNOY, 4145 tons, chartered bareboat basis United Steamship Co.; withdraw managing agency, United Steamship Co.

LAKE FAIRLIE, 4155 tons, chartered bareboat basis United Steamship Co.; withdraw managing caretaker, division of operations.

LAKE GERA, 4155 tons, chartered bareboat basis United Steamship Co.; withdraw division of operations managing caretaker.

LAKE FLORIAN, 4145 tons, chartered bareboat basis Lykes Bros.; withdraw managing agency Lykes Bros.

LAKE SLAVI, 4278 tons, chartered bareboat basis Lykes Bros.; withdraw managing agency Lykes Bros.

WEST ARROW, 8567 tons, assigned Export Transportation Co. managing agent; withdraw division of operations managing caretaker.

LAKE TREBA, 4155 tons, chartered bareboat basis Halschaw Steamship line; withdraw division of operations managing caretaker.

LAKE ELLSBURY, 4261 tons, chartered bareboat basis Halschaw Steamship line; withdraw division of operations managing caretaker.

WEST HELIX, 8527 tons, assigned United States & Australasia line managing agent; withdraw division of operations managing caretaker.

MATTOLE, tanker, 10,200 tons, assigned Columbus Shipping Co. management operation; withdraw division of operations managing caretaker.

LUXPALILE, 7825 tons, assigned A. H. Bull & Co. managing agent; withdraw division of operations managing caretaker.

LEBANON, 7825 tons, assigned A. H. Bull & Co. managing agent; withdraw division of operations managing caretaker.

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Personals

CAPT. ANDREW DIXON and A. L. EVERETT, both vice presidents of Struthers & Dixon, a Pacific coast shipping firm, resigned following the sale of the company to the Cosmopolitan Shipping Co. HARRY A. STRUTHERS president, remains with the company.

* * *

JOHN MOONEY, former superintendent of construction for the Skinner & Eddy Shipbuilding Co., Seattle, has been made general manager of a new shipbuilding and repair plant organized by George A. Armes, former general manager of the Moore Shipbuilding Co., Oakland, Cal. JAMES YOUNG, who was assistant to the president of the Skinner & Eddy company, is secretary-treasurer of the new organization.

* * *

CAPT. M. F. TARPEY, until recently port captain of the Pacific Steamship Co. at Seattle, has been appointed master of the shipping board liner BAY STATE, allocated to transpacific service. He has been succeeded by CAPT. GEORGE H. ZEH.

* * *

A. F. HAINES, vice president and general manager of the Pacific Steamship Co., has been elected president of the China Club of Seattle, which is fostering commercial and personal relations with China.

* * *

C. S. HOLMES, has been transferred from San Francisco, to assume charge of the Seattle office of Struthers & Dixon succeeding GEORGE R. WALKER who has entered business for himself.

* * *

CAPT. H. C. THOMAS, for years commander of the Steamship GOVERNOR in the Puget Sound-California service, has gone to the Orient in command of the shipping board express liner WENATCHEE, operated by the Admiral line. He succeeded CAPT. J. E. GUPTIL assigned to other duties.

* * *

FRANK H. RELYEA, traffic manager of the Oriental Navigation Co., New York, has been named district director of the shipping board at San Francisco, succeeding HEROLD H. EBEY, resigned, who has become a departmental manager for Williams, Dimond & Co., operators at San Francisco of the American-Hawaiian Steamship Co.

* * *

COL. W. B. RYAN, vice president of the United American Lines, Inc., New York, has been appointed as its general European representative. Colonel Ryan will make his headquarters at London. He recently returned from South America where he was investigating conditions affecting the interests of his company. He is well known in steamship and railway circles. Prior to the war he was a director of the American-Hawaiian Steamship Co. Between the years 1907 and 1914 he was vice president and general manager of the Tehuantepec National railroad across the Isthmus of Tehuantepec, forming the link which completed the American-Hawaiian Steamship Co.'s intercoastal service prior to the opening of the Panama canal.

* * *

SIR BERTRAM HAYES, at present commander of the White Star liner OLYMPIC, has been appointed to the command of the MAJESTIC, the world's largest ship, now nearing completion, and scheduled to enter the White Star service between New York and Southampton in 1922. CAPT. A. E. S. HAMBLETON, in command of the ADRIATIC, has been assigned to succeed Sir Bertram on the OLYMPIC. CAPT. F. B. HOWARTH, now on the BALTIC, is to command the new 35,000-ton liner HOMERIC, now nearing completion.

* * *

GEORGE ARMES, president of the Moore Shipbuilding Co., Oakland, Cal., has resigned and JOSEPH MOORE, vice president, has been elected to succeed him. IRA LILLICK and LEWIS H. CROMWELL were made vice president and secretary-treasurer, respectively.

* * *

WILLIAM H. HAMILTON, special deputy collector of the port, San Francisco, for 20 years, has been appointed collector, succeeding J. O. DAVIES.

* * *

DANIEL G. COOKE has been appointed traffic manager of the Trans-Oceanic Steamship Co. with headquarters in San Francisco.

* * *

J. V. C. COMFORT, office manager of the Pacific Mail Steamship Co., has been made director of operations succeeding GEORGE EGGERS. Mr. Eggers and his assistant, RAY BECKET, resigned following the resignation of JOHN R. ROSSETER.

* * *

JOHN QUINN, who was affiliated with the United States shipping board at the port of Boston, and who left that port about two years ago to become assistant director of operations in the New Orleans district, has recently accepted the position of general manager of the firm of S. Sgitcovich & Co., Galveston, Tex.

* * *

W. H. BLAISDELL, formerly general freight agent of the Eastern Steamship Lines, Boston, and who for the past three years has been identified with coal interests at Pittsburgh, has re-entered the employ of this company as commercial agent.

Harriman Opens Agency at Oakland

The agency for the American-Hawaiian Steamship Co.'s lines on the mainland (east) side of San Francisco bay was awarded to the Lawrence Warehouse Co., Oakland, Cal., at the end of October, according to announcement by V. O. Lawrence, president of the company. Future sailings of the American-Hawaiian Fleet from the mainland will be made from the Oakland terminal dock of the Lawrence company at the foot of Jefferson street, and from the Parr terminals on the western waterfront of the city, where the occasional departures and landings of this company's fleet have been made previously.

Increases in service by the American-Hawaiian ships running out of Oakland, also is announced by W. H. Pinkston, manager of the ocean-freight service of the Lawrence company, who stated that five additional ships will be put into the fleet running between Oakland and Atlantic coast and European ports, before the end of the year. At present 13 freighters are in this service, and that of the European-Pacific lines, with which the American-Hawaiian is affiliated, under the United American Lines. By the end of the year, this number will have been increased to 18 freighters, ranging in size from 8000 to 14,000 tons, 16 of them being steamers, and 2 motorships.

Atlantic coast terminals of the American-Hawaiian line are New York, Philadelphia, Boston and Charleston, S. C., and the European terminals are London, Liverpool, Glasgow, Antwerp, Hamburg and Havre.

Obituaries

Gardner G. Deering, 88 years of age, and the oldest active shipbuilder in the country, died recently at his home in Bath, Me. He was head of the G. G. Deering Co. During his more than half a century of shipbuilding, he had more than 100 crafts of various types and rigs to his credit.

Thomas Hammond Smith, ex-commodore of the Hartford, Conn., Yacht club, and builder of several yachts, died recently at his home in Hadlyme, Conn. Mr. Smith was also a member of the New York Yacht club.

Among the vessels which were hit by the storm that swept the lakes Nov. 1 were the steamer EMORY L. FORD, in the mud abreast of the Mutual elevator at Buffalo, and the steamer PETER REISS, also aground at Buffalo. The JOHN P. REISS was aground at Port Colborne. The THOMAS QUAYLE, a coal barge, was sunk at Toledo.

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Pacific Lines Seek Cotton Trade

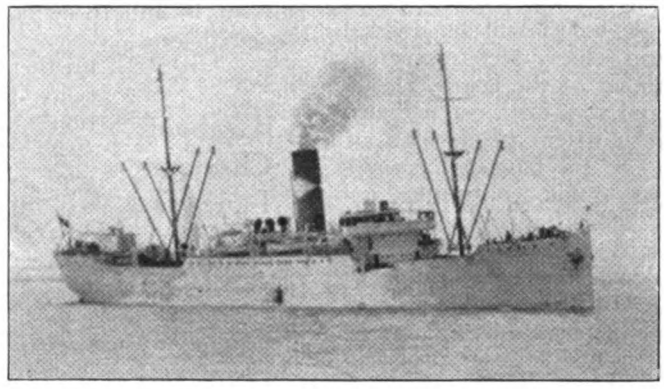
Pacific coast shipping interests are vitally concerned in the hearing to be held at San Francisco in November to consider the question of a rate parity on cotton for export. At the suggestion of Galveston, Tex., interests, the interstate commerce commission has suspended a new rail rate of $1.35 on export cotton moving through Pacific coast terminals. The former rate was $1.50 and the rail carriers reduced this 15 cents in order to equalize the parity between Gulf and Pacific ports.

Transpacific operators maintain that they can not compete with Gulf lines under the rate of $1.50 and furthermore that there is insufficient service from Galveston to care for the export cotton movement. In this contention, Pacific shipping firms are upheld by many of the growers in the interior. The San Francisco hearing follows one at Galveston on the same question. Pacific coast ports have an advantage of time over the all water route.

Notwithstanding the handicap against the Pacific coast, some cotton is moving over the rail and water route, one Seattle steamship company having booked 30,000 bales. During each season, the cotton movement through Pacific ports is an important item and the Pacific lines are determined to get their share of this cargo. Cotton is a desirable freight as it furnishes a nice proportion of measurement cargo.

Fruit Ship Propelled by Electricity

BRITISH builders have delivered the SAN BENITO to the United Fruit Co. and this ship is now added to the company's fleet operating in the tropical fruit trade out of Boston. The important feature about this ship is that she is electrically propelled, being the first ship of this class that the United Fruit Co. has ever owned. She was built by Messrs. Workman, Clark & Co., Ltd., Belfast, Ireland, and is the thirty-sixth ship built by this yard for the same owners, and the latest in a series of eight steamers known as the San type. The previous vessels of this class, however, have all been fitted with reciprocating engines. The SAN BENITO is a finely modeled steamer, especially designed for the fruit-carrying trade, and also fitted up with accommodation for a number of first class passengers. The main generating plant consists of a 20-40-kilowatt Curtis turbo-alternator, arranged 'midships, and taking steam from three oil-fired single-ended boilers, fitted with superheaters. This plant supplies power for a 3000-horsepower, 3-phase synchronous motor, fitted in a separate motor room aft, and coupled directly to the propeller shaft. By placing the motor room aft instead of amidships with the generating plant, the space usually occupied by the shaft tunnel is gained for cargo. The engines were built by the British Thomson-Houston Co., Rugby, England.



S. S. SAN BENITO, LARGEST ELECTRIC FREIGHTER BUILT ABROAD, NOW IN FRUIT CARRYING TRADE

All the vessel's holds and 'tween decks are insulated and especially fitted up for the carriage of bananas, and the winches and derricks are arranged for the quick handling of the cargo. Accommodation for passengers has received special attention to assure comfort when voyaging in the tropics or passing, as these steamers do, from tropical waters to northern range ports in the winter time in the space of a few days. During construction, the vessel was under the direct superintendence of Captain Young, the resident inspector of the United Fruit Co.

After an extended trial, during which everything went smoothly, the machinery more than justified its adoption by getting a speed well over that necessary to comply with the specified requirements. The vessel left Belfast Sept. 20 for Valencia, Spain, and then cleared Almeria on Oct. 10 for New York, bringing over 1,500,000 pounds of Valencia onions, 220,000 pounds of Spanish figs and 650,000 pounds of Almerian grapes.

The SAN BENITO, whose dimensions are 340 feet by 31 feet 9 inches, has a gross tonnage of 3724 tons. She is the largest electrically propelled freighter built and equipped abroad. The shipping board owns some larger electrically propelled freight vessels, but the government's ships were converted to electric-propulsion after they had been in operation.

The United Fruit liner reached New York Oct. 24 after a hard tussle with cyclone seas on her first transatlantic voyage. For 24 consecutive hours she was tossed about in the worst storm that Capt. J. C. Jackson of the vessel has experienced in his 29 years at sea, but she reached port in perfect condition so far as her equipment was concerned. "During those 24 hours," said Captain Jackson, "the propeller was out of the water as much as she was in but there was not the slightest evidence of any racing."

The SAN BENITO was designed for a speed of 12.5 knots. On her transatlantic trip, she maintained an average speed of 10.5 knots and made a maximum speed of 15.1 knots. Her circulating pumps, forced air draft and ventilating system are electrically operated. Previous to this time the CUBA has been the only vessel in service driven by a synchronous motor. The General Electric Co., Schenectady, N. Y., made the motor for this ship and it was installed at the yard of the Morse Dry Dock & Repair Co., New York. A description of the CUBA was published in MARINE REVIEW, January, 1921, and more recent electric-propulsion installations were described in the October, 1921, issue of MARINE REVIEW.

The SAN BENITO was sent to Boston where she was placed in service between that port and ports of the West Indies, Central and South America, in conjunction with her three sister ships, the SAN PLAS, SAN GIL and SAN BRUNO, all of which are equipped with reciprocating engine drive.

Gossip which commonly is heard in shipping circles is to the effect that the United Fruit Co. was prompted to order the electric equipment for the SAN BENITO as an experiment. Whether this is true or not, the results will be of value to the whole shipping world as for the first time comparative tests will be possible on ships of the same class between two drives, steam and electricity.

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

World Charter Market Reviewed by

OFFERS VESSELS

Fleet Corporation To Test Steamer Market—Shipping Board Creates Six Divisions After British Plan

AMERICAN shipping has two agencies in Washington to look to for aid and assistance, now that the Emergency Fleet corporation definitely has been divorced from the shipping board. President Powell of the corporation announces that he will test out the steamer market by offering for sale 12 of the best steel steamers in the possession of the government. This step is taken because the corporation believes the shipping situation has so far improved as to create a market for a few good ships. During the past month the corporation has been able to charter a number of vessels upon the bareboat basis. These steps indicate an early cessation of the ruinous policy of allocation.

Coincident with this, Chairman Lasker of the shipping board announces that the board will be divided into six units with a bureau chief over each unit and each supervised by a member of the board. Duties will be assigned each unit and the work so parceled out will be attended to much after the fashion of the British board of trade. The six bureaus or units will be domestic and outward traffic, controlling rail rates, domestic agreements in conference, coastwise and interior shipping; inward and indirect traffic, which will study all foreign trade routes, world trade conditions and supervise inward and indirect conference agreements and rates; operations, including the personnel division, trades and facilities division; fuel and machinery division; construction, including a design division; laws, and miscellaneous.

To Provide Philippine Service

The Fleet corporation, it is announced, intends to supply necessary tonnage for Philippine service by next February when the President will authorize the extension of the coastwise laws to the islands, excluding foreign ships from that service. This is the first aggressive step the new board actually has taken to impose the provisions of the Jones act. Judging from the activity in shipping circles, it would appear many important developments are pending among the various large companies, but they are being held back until something more definite can be had as to the shipping policies of the government.

Shipping conditions have improved materially. This is borne out by the testimony of Robert Dollar, whose shipping acumen is not questioned. Upon his return from a round-the-world cruise, Captain Dollar announced:

"A distinct turn for the better is in sight. The United States, with its large merchant tonnage not only can, but will obtain its full share of trade."

On the Atlantic, the chief business being done is in grain, coal and lumber to Europe and South American destinations, and by sugar carriers from Cuba. There has also been a moderate amount of chartering of a miscellaneous character. One of the first effects of the improvement in the freighting conditions was the break in rates in various conferences. This is a good indication as it means that cargoes are possible and the tramp carriers have begun to seek it out and attempt to take it away from the line ships. Freight rates to Scandinavian ports were reduced; there was a cut in the rates to West African ports of about 10 per cent. Some reductions also were made in rates to Italian ports. Cotton has been going on an open market rate which was, during the past month, battered down to 25 cents per 100 pounds from New York to Liverpool, or to a level equal to the prewar rate. Coal to South American ports has held firmly at $5, and there has been a stiffening in demand for coal boats for West Italy.

The demand for sugar carriers from Cuba transatlantic and to north range ports was one of the dominating influences in the market during the past 30 days. For United Kingdom and continental deliveries, steamers were said to have been closed at $5.50 and $5.75. A number of charters from Cuba to ports north of Hatteras were reported to have been made upon the basis of 14 and 16 cents. Ten steamers were reported closed in one day.

Bareboat Charters Increase

Further indicating improved conditions, the Emergency Fleet corporation has let six lake-type steel steamers upon a bareboat charter plan. Three were taken by the United Steamship Co., Galveston, Tex., controlled by Munson, for services between West Indian and Gulf ports. Lykes Bros., Galveston, were the charterers of the other three vessels. They were all taken for three months upon the basis of 50 cents per ton per month. The corporation is now ready to make similar charters on the Pacific coast. Practically despairing of settling the Egyptian cotton controversy with the British steamship lines, the Emergency Fleet corporation has decided to fight the matter out and, therefore, cut the rates 10 shillings under the rate quoted by the British ships. In the meantime W. A. Bill, who has charge of the Mediterranean services of the corporation, sailed for England presumably to confer on the matter with the British shipping interests. The government

Is Rate War On?

ACTION of the Cunard Steamship Co. in cutting rates on oil and landing a contract for carrying between 7,000,000 and 10,000,000 cases of oil overseas for the Standard Oil Co., indicates a rate war has been inaugurated. This is believed to be the largest oil contract ever placed and was sought by three bidders, including the United States shipping board. The Cunard bid is said to have been several cents below the other bids, actually below the cost of transportation and in reply to the shipping board's action in recently having made an issue of the carrying of Egyptian cotton. Other oil contract awards are awaited with interest.

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

has decided not to attempt to settle the matter by diplomacy but leave the case to a settlement through practical shipping channels. Under the surface there is a seething caldron in the international shipping game. It not only is a question of competition between British and American interests but other nationals are discovering they may not expect to find things coming their way so easily. When the board's Dutch East Indian services were realigned and the berth assigned to the United American Lines, the Netherlands Steam Navigation Co. announced it would speed up its services beginning in December. The Rotterdam Lloyd contemplates a similar move.

A complete realignment of the services operated upon allocation of government ships has been worked out and the changes are now being made. This means the retirement for the present of some 1200 government ships. Of the 23 combination passenger and cargo boats built for the government present plans are that five will be maintained in service by the Admiral line from Seattle to Japan-China-Manila, five will be operated by the Pacific Mail line from San Francisco to the same ports, five will be operated by the Munson line from New York to Buenos Aires, three will be operated by the United States line from New York to London, and five will be operated by another line from New York to Rotterdam.

Changes in Freight Carriers

In the carriage of freight exclusively a number of changes in operators are now in order. J. H. Winchester & Co. have been assigned the New York-Aberdeen-Leith berth. The Export Steamship Co. will cover all Greek ports, Malta, and north Africa east of Bizerta and the Palestine coast. It will cover Constantinople in combination with A. H. Bull & Co., which will operate also to all Black sea ports. The Baltimore Oceanic Steamship Co. will conduct the services from North Atlantic range to Mediterranean ports from the west coast of Italy to Portugal. Among the privately owned ships a renewal of activity is in evidence. The American-Hawaiian line is prepared to meet competition of any foreign line regularly serving European ports and San Francisco. The FLORIDIAN was the first ship of this fleet to sail in the new run. The Moore & McCormack Co., manager of the Commercial Steamship lines, has announced the completion of an arrangement to operate its steamers in connection with the service of the Pacific, Caribbean & Gulf Steamship Co. This forestalls any curtailment in the services between Pacific ports and the West Indies and Gulf ports. The Mallory line will supply facilities to Tampa shippers for delivery of their products in New York direct. The steamer J. L. LUCKENBACH was sold to B. L. Stafford Jr. and associates, renamed the PRINCESS, and is now being operated by the Congress lines in the intercoastal business.

The Atlantic Fruit Co., with the specially built fruit steamers SAGUA, TANAMO and CANANOVA, has opened a weekly service between New York and Porto Rico. The general agents for the line in Porto Rico are Villar & Co., Inc., San Juan.

Interest in Foreign Agreements

Unusual interest in shipping circles has been centered around the various agreements and rumors of agreements between American steamship companies and German lines. It has been reported Hugo Stinnes, the German industrial magnate, has made still heavier investments in the North German Lloyd and that it is believed now he also has control of the Hamburg-American line. If this centralization of interest has been effected in Germany, the wonder here is how the agreement between the United American and the Hamburg-American, and that between the North German Lloyd and the United States lines are going to work out. Report has it that Kermit Roosevelt of the Roosevelt line, one of the three joint operators of the United States lines, is after the North German Lloyd agreement.

The Harriman and Hamburg-American lines are operating ships jointly between Hamburg and Buenos Aires. The Hamburg-American also is operating vessels from Hamburg to Mexico, into which services Mr. Harriman is not expected to join before next spring. Four 12,000-ton steamers recently have been built for the Stinnes group in Germany together with two smaller vessels, making a total new tonnage of 54,300. In addition, it is said, approximately 62,480 tons of Swedish ships have been transferred to German owners, and application has been made to sell to Germans about 30,000 more tons of Swedish ships.

The North German Lloyd is reputed to have taken an office in New York which will be opened around the first of the new year. Hugo Stinnes already has an executive office in New York.

At the same time, it is significant the agreement which existed before the war between certain German and British shipping interests, whereby competition in certain trades in the Far East is eliminated, have been renewed. In the early part of October, the so-called Asiastic conference was renewed between

SPEED SERVICE

Foreign Lines Make Effort To Get Business — Government Realigns Operations of Allocated Vessels

Board Settles Claim

CASH award of $51,471.92, after an original claim of $1,640,433.70, has been allowed the Ralston Steel Car Co., Columbus, O., by the claims commission of the United States shipping board. It will be necessary to get an appropriation from congress for final settlement. The company fabricated steel for various shipyards and in the total claim set $1,026,277.61 as profits which might have been earned if the board had not taken over the company's plant. Disallowed by the commission, this sum was waived by the company. The actual award was $208,296.64, against which the board had a claim of $156,824.72, leaving a net award of $51,471.92.

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

the German and English shipping companies. The Hamburg-American and the North German Lloyd are contracting parties with the Bucknall Steamship Co., London. The new agreement, which is expected to embrace other English companies, is for a joint service to the Far East in which both the German and English companies will place their own ships. A number of new German vessels will be available for this service by early spring of 1922.

Pacific Charters Contrast

The north Pacific charter situation presents a number of contrasts. While freights to the Orient remain firm, grain rates to the United Kingdom and continent have shown a decided drop while intercoastal rates on lumber have also been reduced. The cargo movement to the Orient still is brisk and all the regular lines are booked for three months in advance. The extra carriers which are being allotted to this route are having no difficulty in filling their space. Owing to the quantity of freight offering, rates are holding firm and up to next March the various operators are asking the same level of freights as prevails today.

Light cargoes still are coming from the Orient. However, the westbound movement is one of continued strength. Lumber is commanding a $15 rate with big timbers and logs taking a differential of about $2.50. It has been difficult for exporters to get space for logs and two sailing vessels have been pressed into this trade. Large quantities of wheat and flour are moving to the Orient on a rate of $7 although an extra steamer was recently on berth at $6.50. Steel in small quantities is being booked through Pacific gateways for the Orient. Increasing quantities of copper are being sold in the Oriental market and the rate on this commodity has been reduced from $8 to $6.50 per short ton.

The market is interested in recent time charters which prior to the war were much in vogue in Pacific trades. Following the fixing of three large Norwegian freighters for a year at $1.10 per deadweight ton per month, another Norwegian freighter was taken for 12 months on a basis of 5 shillings 9 pence which indicates the range of the market. Other vessels are offering at around 6 shillings.

The general tendency of ocean freights during the month has been downward with some trades almost approaching prewar levels. Freights to the United Kingdom and continent have slumped badly during the month. Little lumber is offering to the Hawaiian islands at present. Although some cotton is being booked from southern centers to Japan through Pacific terminals, the bulk of this movement will go through Gulf terminals unless a parity of railroad rates is established. Shipping board tonnage practically has been eliminated from Pacific trades with the exception of the passenger and freight lines which are still operating under allocation. The entire freight situation reflects a tendency toward normalcy.

Northbound Charters Stiffen

The charter market for steamers from San Francisco northward, stiffened somewhat during the latter part of September and throughout October, with prospects of continuing better for awhile than they had been for some months prior to Sept. 15. The reason for this largely is to be found in the heavy lumber movement from the Pacific northwest to the Orient, due to the building boom which is spreading throughout the coastal cities of Japan and China. During October and early November, a minimum of 20,000,000 feet of lumber moved out of northwest Pacific ports of the United States to the Orient, at least eight cargoes having been booked at the old rate base of $12.50 per thousand linear feet, taken prior to the suspension order issued by the shipping board in August last.

Sailing ship charters out of California are in greater demand than steamships. The placing of the barkentine KATHERINE MACKALL on berth for South Africa from San Francisco and Puget Sound, late in September, marked the first of the preparations to put a number of former German sailing ships, now at Sausalito, Cal., into commission. The MACKALL is the first sailing vessel in nearly 20 years to be put in berth at San Francisco for these foreign ports. Inquiries for sailing vessels to carry barley to Scandinavian ports also are increasing in San Francisco shipping circles.

Under private terms, with the names of the parties withheld, the Norwegian schooner, NOTTINGHAM, 1062 tons, has been chartered to carry lumber from Puget Sound to Callao, and the Japanese steamer, THAMES MARU, 4259 net tons, has been chartered to carry grain from Portland to ports of the United Kingdom and continental Europe.

Trade Along Gulf Is Dull

The chartering market in the Gulf section had been somewhat dull, especially toward the latter part of October. Shippers have been inclined to withhold their offerings until the railroad situation has been cleared up, and rates, in consequence have shown a tendency to weaken. Grain shipments from the Gulf region have been tapering off.

Late October grain charters reported at New Orleans included the British steamship HOMER CITY, 33,000 quarters, Gulf to the United Kingdom or continent, 20½ cents, option Mediterranean, 22½ cents, late October and the British steamship GREAT CITY, 40,000 quarters, Gulf to West Italy, 5 shillings 3 pence, November.

The Norwegian steamer THOMAS KRAG, 2241 tons, is reported in the lumber line from the Gulf to Buenos Aires, or Rosario, 185 shillings. Two fixtures were reported for cargoes of case oil from Port Arthur to China, with options of Australia and New Zealand, on the basis of 25 and 27 cents.

The market for sail tonnage continues dull with few fixtures reported. Loadings from the lumber ports of the Gulf, destined for Cuba, Porto Rico and Mexican ports have been fairly active. Rates remain weak.

Montreal Season's End Near

On Nov. 25 the buoys placed for guidance to the port of Montreal are to be taken up, and few vessels will make the trip after that date. Bookings for the full season were completed Nov. 1 which meant an early start in the diversion of wheat to Portland, Me., and Boston. One company early in the month reported having already handled, out of the port of Boston, a half million bushels of grain for the United Kingdom. Other grain shipments out of Boston have been to the Mediterranean, Rotterdam and Antwerp. The export grain situation at Boston for the coming winter looks decidedly favorable, and trade in all lines is reported either holding its own or improving. One

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Ocean Freight Rates

Per 100 Pounds Unless Otherwise Stated

Quotations Corrected to Nov. 2, 1921, on Future Loadings

New York to	Grain	Provisions	Cotton (H.D.)	Flour	General Cargo cu. ft.	General Cargo 100 lbs.	††Finished steel	Coal from Virginia cities
Liverpool	$0.17	$0.60	$0.25	$0.22	$0.45	$0.85	$7.00T	.....
London	0.17	0.60	0.25	0.22	0.45	0.85	7.00T	.....
Christiania	0.25	0.40	0.47	0.30	0.50	1.00	10.00T	$5.00T
Copenhagen	0.25	0.40	0.47	0.30	0.50	1.00	10.00T	5.00T
Hamburg	0.18	0.35	0.40	0.23	0.45	0.82½	9.00T	4.00T
Bremen	0.18	0.35	0.40	0.23	0.45	0.82½	9.00T	4.00T
Rotterdam	0.16½	0.32½	0.35	0.21½	0.40	0.75	8.00T	3.50T
Antwerp	0.16½	0.32½	0.35	0.21½	0.40	0.75	8.00T	3.50T
Havre	0.16½	0.50	0.35	0.21½	0.40	0.75	8.00T	4.00T
Bordeaux	0.16½	0.50	0.35	0.21½	0.40	0.75	8.00T	4.00T
Barcelona	0.22½	20.00T	0.82½	0.65	—20.00T	—	12.00T	4.50T
Lisbon	0.22½	20.00T	0.82½	0.65	—20.00T	—	12.00T	4.00T
Marseilles	0.22½	0.75	0.75	0.40	—20.00T	—	10.00T	4.50T
Genoa	0.21	0.75	0.75	0.50	0.50	1.00	9.00T	4.50T
Naples	0.21	0.75	0.75	0.50	0.50	1.00	9.00T	4.50T
Constantinople	0.31	15.00T	0.75	0.36	—22.00T	—	15.00T	5.25T
Alexandria	0.31	15.00T	0.75	0.36	—22.00T	—	15.00T	4.75T
Algiers	0.35	0.85	....	0.40	—22.00T	—	12.00T	4.25T
Dakar	....	20.70T	....	20.70T	—25.00T	—	18.00T	....
Capetown	13.00T	23.00T	....	13.00T	—23.00T	—	15.00T	.....
Buenos Aires	....	....	....	....	—20.00T	—†	10.00T †	5.00T
Rio de Janeiro	....	....	....	....	—22.50T	—†	16.50T †	5.00T
Pernambuco	.....	.....	....	....	—23.50T	—†	17.50T †	5.25T
Havana	0.35*	0.40*	....	0.35*	0.47*	0.94*	0.30*	1.75T
Vera Cruz	....	0.70	....	0.50	0.45	0.90	0.35	2.50T
Valparaiso	....	1.25	1.16	1.00	0.70	1.25	14.00T	4.25T
San Francisco	....	0.75	....	0.85	.....	.....	0.75	....
Sydney	....	.....	....	....	20.00 to 25.00		11.50	....
Calcutta	.....	21.00T	.....	.....	—21.00T	—	18.00T	....

T—ton. †Landed. ††Heavy products limited in strength. *Extra charge for wharfage.

From North Pacific Ports to	Lumber Per M. ft.
San Francisco	$8.00 to 7.50
South California	8.00 to 8.50
Hawaiian Islands	11.50 to 15.00
New Zealand	15.00 to 18.00
Sydney	15.00 to 18.00
Melbourne-Adelaide	18.00 to 20.00
Oriental ports	14.50 to 17.50
Peru-Chile	17.00 to 18.00
South Africa	27.50
Cuba	20.00
United Kingdom	150s
United Kingdom (ties)	125s
New York	17.00 to 20.00
New York (ties)	18.00
Buenos Aires	17.00
	Flour and wheat
Oriental ports	$7.00T
U. K.	35s to 40s
Scandinavia	60s to 65sT
Mediterranean	63s to 65sT
	Steel
Oriental ports	$ 5.00T
	Cotton
Oriental ports	$ 7.00T
	Apples
United Kingdom	$1.00 per box
	Copper
Oriental ports	$ 6.50

Principal Rates To and From United Kingdom

	s	d
Grain, River Plate to United Kingdom	19	0
Coal, South Wales to Near East	15	0
Coal, Newcastle to France	8	0
Coal, South Wales to Buenos Aires	20	0
Iron ore, Bilboa to Middlesbrough	7	9
General British market, six months time charters, per ton per month	5	9

Bunker Prices

	At New York: Coal alongside per ton	Fuel oil 16 baume per barrel	Diesel oil gravity 25-30 per gallon		At Philadelphia: Coal per ton	Fuel oil 16 baume per barrel	Diesel oil gravity 25-30 per gallon
Jan. 8	$7.00	$2.94	10 cents	Jan. 10	$9.45	$2.08	.....
Apr. 6	6.40 @ 6.75	1.95	6.5 cents	Apr. 7	5.75 @ 6.00	1.98	5.7 cents
July 8	5.75 @ 6.25	1.45	4.25 @ 5.25 cents	July 7	4.90 @ 5.45	1.47½	4.5 cents
Oct. 4	5.85 @ 6.15	1.45	4.25 @ 5.25 cents	Oct. 6	*6.10 @ 6.25	1.80	4.00 @ 4.25 cents
Nov. 4	5.75 @ 6.00	1.70	6.15 @ 7.00 cents	Nov. 7	*5.95 @ 6.10	1.68	5.00 @ 6.00 cents

*Trimmed in.

Other Ports

Boston coal, per ton,	$9.00
Boston, oil, per barrel	1.25
Cardiff, coal, per ton.	23s
London, coal, per ton.	30s
Antwerp, coal, per ton	31s

factor which has helped Boston has been the signing of an agreement between the longshoremen and steamship interests covering a reduction in wages. These reductions are effective for one year and are as follows: General merchandise reduced from 80 cents to 65 cents an hour; bulk cargo from 85 cents to 70 cents an hour; and grain from $1.00 to 85 cents.

The coast to coast trade continues without much change in tonnage handled, but more interest is expressed in the possibilities of this service, and three companies had sailings from Boston for the Pacific coast early in November. One company in this service has recently asked the shipping board for additional vessels. A fourth company, Crowell & Thurlow, Boston, has started an additional service to the Pacific coast to be known as the Intercoastal Sea Carriers lines. Rogers & Webb have acquired a new vessel, the WORCESTER, which has left on its first trip to Montreal, and then to Rotterdam and Antwerp. A new service is to be put in operation in the near future between Boston and Halifax and St. Johns, N. F., with the first sailing by the BOURNHOLME, 1450 tons. The new service of C. H. Sprague & Son, between Boston and Santos, Brazil, is reported as developing favorably, with a vessel already loaded and cleared at Santos.

Freight rates are spotty. Here and there a service shows tendency toward firmness, but on the whole rates have not changed. Grain to Mediterranean from Boston is down to 22 cents. Coastwise coal rates advanced slightly late in October, only to fall back again within two weeks to the old levels.

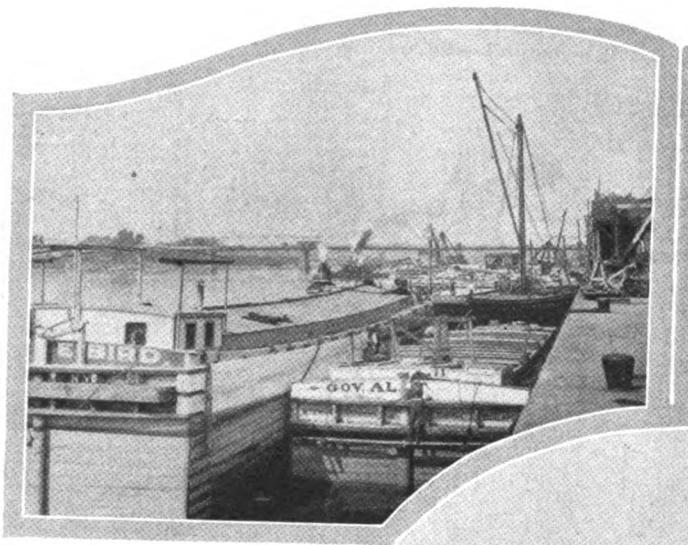
Announces Cotton Settlement Is Near

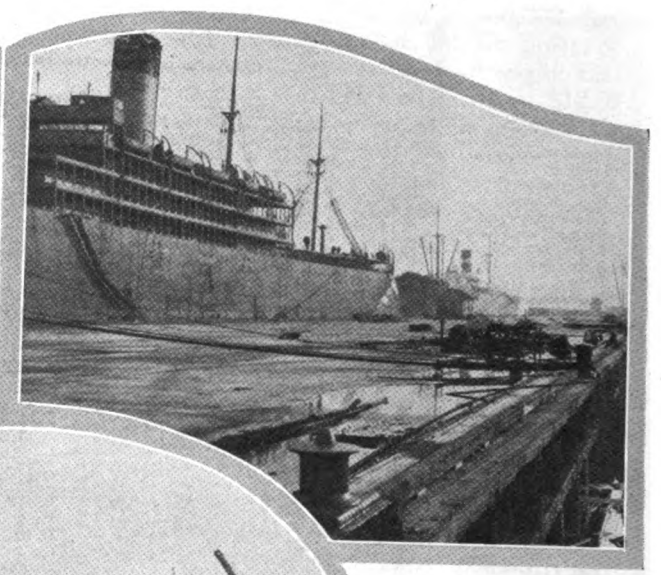
From Our European Manager

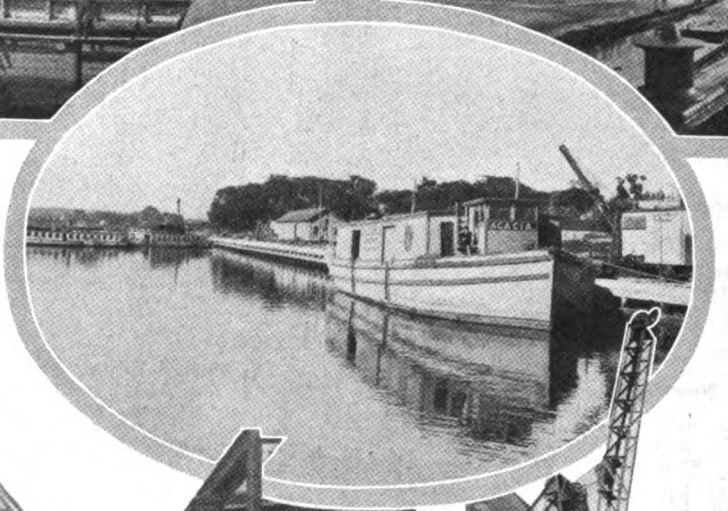
London, Nov. 10.—(By Cable)—Outward shipments of coal continue to increase. October coal exports were 3,400,000 tons. As a result, shipping conditions have slightly improved. Cardiff to Port Said is bringing 15s, to West Italy 13s 6d, to River Plate 20s. Coal cargoes have been chartered to San Francisco at 18s and to Honolulu at 20s. Far eastern trade is inactive, Australia alone offering full cargoes. Grain shipments from River Plate are light. Other freight routes show a slight strengthening of rates. Sir Frederick Lewis, chairman of the Prince line and an official of the Liverpool conference, announces that the Egyptian cotton controversy with the United States shipping board probably will soon be adjusted satisfactorily to both sides.

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

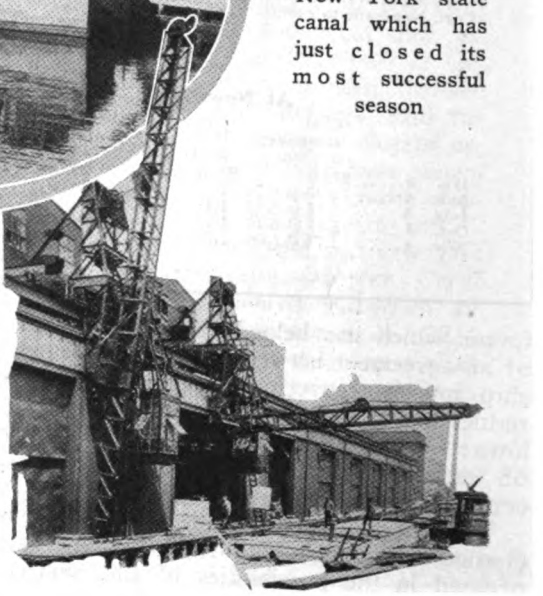
Photographs from Far and Near

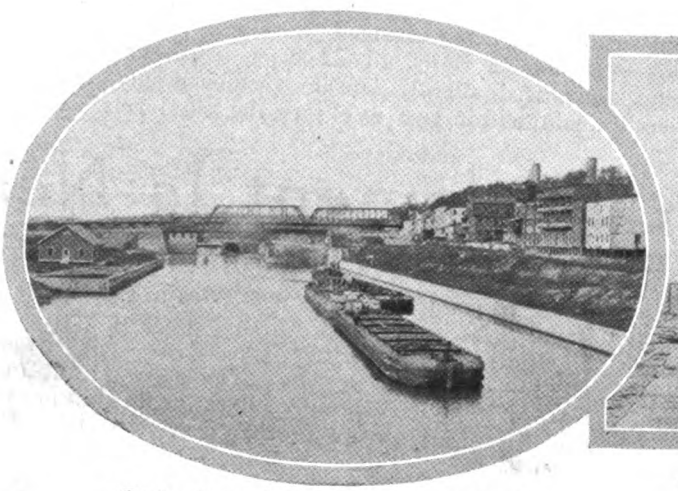




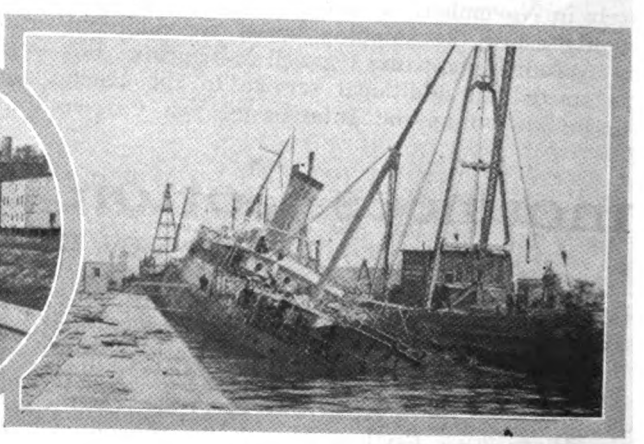


Barges and terminals of the New York state canal which has just closed its most successful season





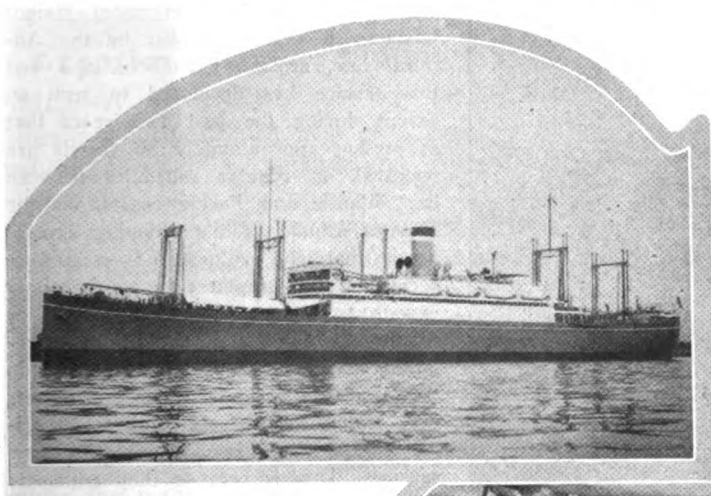
Grain barge fleet enroute to Atlantic

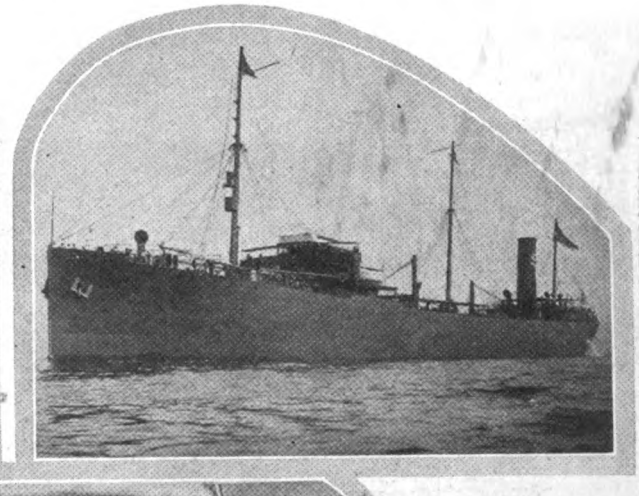


Improper loading caused this vessel to sink

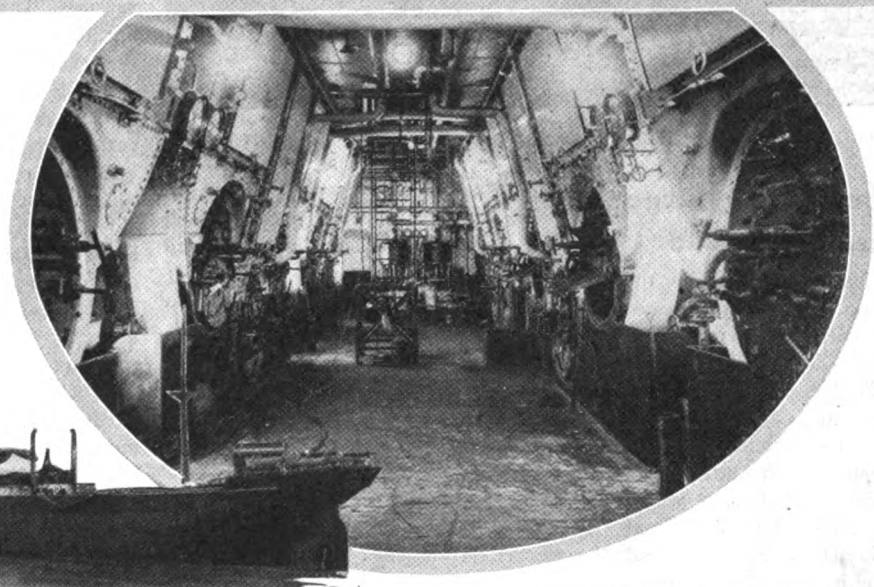
Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

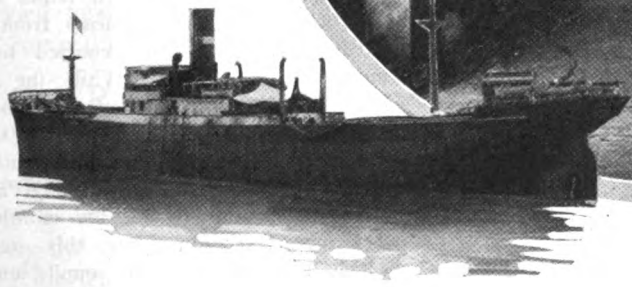
Latest Marine News in Pictures

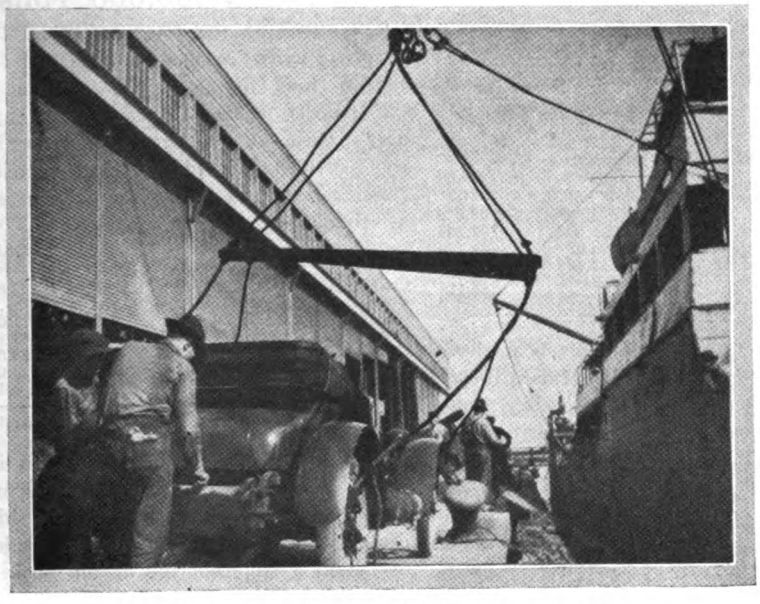




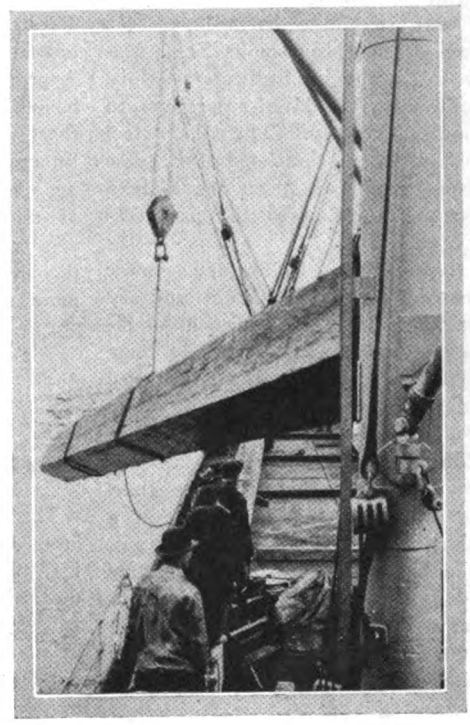
Above, liner Hoosier State and tanker Empire Arrow. (Right) Boiler room of liner. (Below) Ocean freighter at Houston.





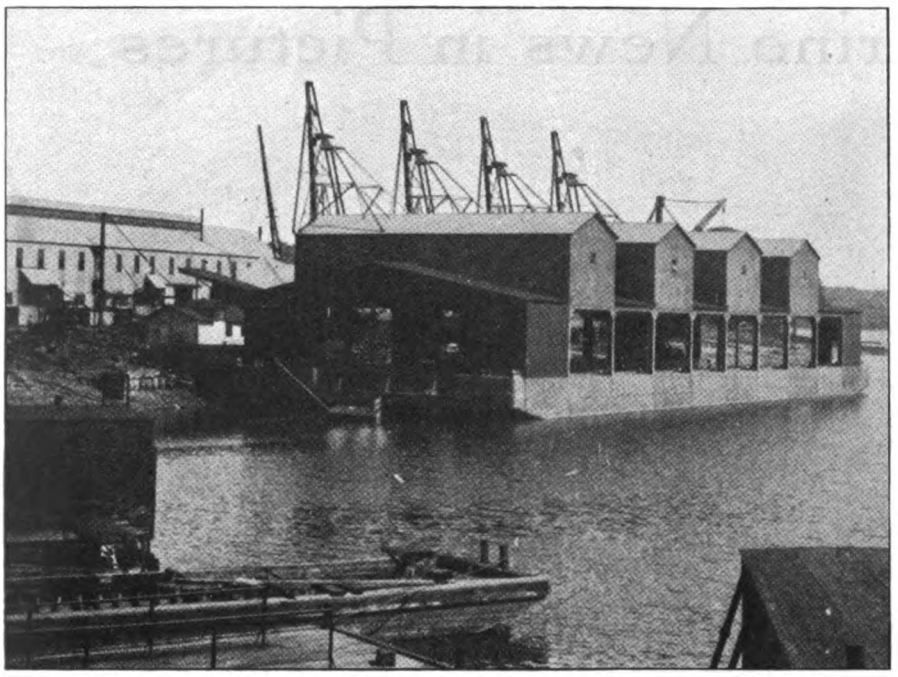


Loading uncrated automobiles at San Francisco



Handling timbers at a Pacific port

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



WORLD'S LARGEST TERMINAL BARGE WILL BE USED ON MISSISSIPPI

Complete Terminal Barge for Mississippi Trade

The terminal barge, largest in the world for use on inland waterways, which has been under construction at the Dubuque Boat & Boiler Works since August, 1920, has been completed. The government towboat, NOKOMIS, towed it to St. Louis, where it will be used in connection with the line of government towboats and barges which beginning next season will tow coal north from St. Louis to St. Paul and bring iron ore south.

The four steel tow boats have been completed at the Minneapolis Steel Machinery Co. plant at Stillwater, Minn., and went down the Mississippi river to St. Louis recently. The 19 steel barges have been completed for some time, and some of them have been used on the lower river the past season.

The terminal barge is designed to make the transfer of cargoes from railroad to boat and boat to railroad a simple and speedy matter. It is 320 feet long, has a 75-foot beam and an enclosed steel roof. Three standard rail tracks are laid on each section to accommodate four cars, so that 12 railroad cars may be on the barge at one time. Loading platforms for boats are on a level with the car floors and four barges, two on either side of the terminal, may be loaded simultaneously. Four electric cranes, 75 feet in height will handle the cargoes, lifting the coal or iron ore from the cars and carrying it out to the boats.

The hold is divided into compartments for oil, the barge thus acting as a supply station for vessels which burn oil. Electric pumping machinery will pump oil from the hold directly on to the boats.

The accompanying photograph shows the barge in the Mississippi at Dubuque, just before it was taken down river.

Panama Canal Traffic

In September, commercial traffic through the Panama canal dropped slightly below the August total but was heavier than during May, and July. The traffic from the Atlantic to the Pacific was, with two exceptions, the heaviest since the opening of the canal. Approximately 56 per cent of this westbound traffic was routed to the west coast of the United States and Canada. Intercoastal business during the preceding year represented only 26 per cent of the westbound traffic. Following is a summary of the commercial traffic through the canal during the past six months:

1921	Number of ships	Registered gross tonnage	Tons of cargo
April	227	1,203,087	907,613
May	210	1,092,602	792,735
June	192	960,857	694,720
July	206	1,022,802	708,982
August	236	1,219,817	839,273
September	221	1,167,220	754,894

Three new automobile ferry boats have been ordered by the Six Minute Ferry Co., for use on San Francisco bay, from the Bethlehem Shipbuilding Corp. They will cost $1,250,000, will carry 80 automobiles each, and will operate between San Francisco and Oakland. They are to be all steel, 400 tons of metal going into them, and will be as nearly fireproof as possible.

Intercoastal Business Grows Rapidly

A survey of the intercoastal freight business, issued in October by the Admiral line, at San Francisco, says that this service has developed to such an extent during the past two years that at present approximately 80 vessels are operated on regular schedules between the Atlantic and Pacific coasts, via the Panama canal. While shipping experts agree that the volume of cargo offerings at the present time average only enough to provide full loads for 15 or 20 ships a month, the Admiral line reports that steamship lines engaged in this trade are augmenting their fleets with additional vessels, and that various other lines are contemplating new services. This is because they anticipate an improvement shortly in freight traffic between the two coasts.

Wool shipments, which have figured largely in east bound cargo during the past three months, are rapidly diminishing, the report declares. This is due to the fact that most of this year's clip, with vast quantities of last year's holdover, already has been marketed. In place of wool, the report says, steamer holds are now being filled with canned fish from Alaska and the Columbia river and canned and dried fruits from California. Lumber shipments from the north Pacific are also reported to be increasing in volume. While the output of northwestern mills is still below normal a total of approximately 63,000,000 feet was shipped from the Columbia river by water to eastern and Pacific coast destinations during the month of September according to this report which adds that Puget sound lumber figures were not available.

Exceeds 2,000,000 Tons

Commerce on the rivers of the Pittsburgh district reached a total of 2,106,608 tons in October, according to the report of the United States engineer's office at Pittsburgh. This traffic was divided according to commodity classifications and among the three rivers as follows:

Commodity	Allegheny river	Monongahela river	Ohio river
Coal	40,740	1,314,816	107,805
Coke	.....	21,104	.....
Gasoline	1,700	1,070	1,000
Gravel	150,604	93,470	43,547
Sand	151,568	91,507	55,656
Unclassified	1,203	23,750	3,090
Packet cargo	.....	.....	4,128
Total	345,815	1,545,667	215,126

The Luckenbach Steamship Co. has installed a complete rate service information bureau, for the benefit of all shippers by all lines, irrespective of whether or not their shipments go by the Luckenbach line, at its offices in San Francisco.

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Editorial

Exporters Neglect Simple Rule

JAMES A. FARRELL, one of the few great American business men who have both the ability and the foresight to promote the American merchant marine, called the attention of the National Foreign Trade council at its last meeting to the mistake made by American manufacturers in allowing foreign competitors to control the delivered price of American exports. When the Americans import goods, they buy at a price including delivery at American ports. The foreign business man thus retains control over the price of his goods, by insisting upon and obtaining the best ocean freight rates.

Among the many disastrous inheritances from our half century of marine weakness, is our practice of selling American goods for export on the basis of delivery at an American port. What happens to them between the American port and destination is blandly entrusted to the charity of our competitors. Instances of distorted rates by which short hauls from American ports paid much higher freights than long hauls from European ports are well known. The American business man too frequently fails to trace his failure to obtain orders for export to the higher ocean freight rates levied against his goods as compared with his foreign competitor.

Get Rid of These Contracts

THE soundness of Mr. Farrell's argument that American exporters should awake to the necessity of using every agency to promote trade is made clearer by the present discussion of the contracts between American railroads and foreign steamship companies. The phrasing of these contracts is surprising to those unfamiliar with the part played by foreign lines in controlling our export trade during the past half century. The American railroads invariably pledge themselves to give all their freight to the foreign steamship line, and to promote the foreigner's interests exclusively. Free warehouse space aids in lowering the foreigner's costs.

The defense now is that the contracts were necessary at a time when American overseas shipping was dead. The protest is made that these contracts are largely harmless but the plain fact is that the agreements should be ended as quickly as possible and renewals prohibited. Legal action should not be necessary as the sound commercial judgment of American railroads and American manufacturers should enlist them on the side of American shipping. Full use of American ships in controlling the delivered price of American exports means more rail freight and more sales. The selfish interest of the foreign steamship lines naturally and properly controls their actions and their plans can not be expected to include the development of business for American plants and railroads. The American steamship company must rely upon the development of these industries for its trade so that the efforts of the three arms of American foreign trade run parallel.

The shipping board intends to analyze these railroad contracts with foreign lines, the senate insists upon the investigation and the interstate commerce commission also is becoming interested. No railroad has signed such a contract with any American steamship line. The ambitions of the general public to have a real merchant marine are better expressed in the provision of the Jones law calling for preferential rail rates on goods to be shipped in American bottoms than in any agreement by American railroads to foster foreign steamship lines.

Extend Coastwise Laws to Philippines

YOU can find several solid reasons why American shipping dropped from first to almost last place in world strength during the past three quarters of a century. But you can find only one substantial reason for its success in holding a place in the race and not being forced out entirely. That reason is the restriction of coastwise traffic to American bottoms.

Our general folly in handling marine problems makes the retention of this life giving restriction all the more puzzling. It has been attacked time after time but weathered each storm.

Another squall now threatens in a bill at Washington to open Alaskan trade to foreign vessels. This trade has been under the coastwise restriction and much of the underlying strength of several American lines on the Pacific rests on this business. The proposed change is indefensible.

Of exactly opposite significance and value is the announced intention of the shipping board to provide sufficient tonnage to handle all Philippine trade. President Harding will then declare effective the provision of the Jones law making Philippine-United States trade coastwise business and as such restricted to American ships. February, 1922, is the time set.

This step will be of almost incalculable benefit to American shipping. During and after the war, Americans developed shipping to a point where they handled the bulk of the big Philippine trade. But for a year or more, the foreign lines have been gaining ground and driving American vessels out of that route. Philippine-United States trade is one of the big prizes of the shipping world and the best interests of both the islands and this country call for American ships controlling that service.

Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Late Decisions in Maritime Law

Legal Tips for Ship Owners and Officers

Specially Compiled for Marine Review
By Harry Bowne Skillman
Attorney at Law

IF PARTICULAR instructions are given by navigators, of a steamship which put tug assisting in moving her to a pier in the position she was in at the time she was struck, any maneuver of the ship without notice, resulting in damage, would be at the risk of the ship, and not of the tug.—ANCON, 263 *Federal Reporter* 886.

* * *

Wharfage furnished to a vessel undergoing repairs is part of the charge giving rise to the lien provided for by act of congress of June 23, 1910, it was held in ANDREW J. SMITH, 263 *Federal Reporter* 1004. If the wharfage charge is not a part of the repair bill, then no maritime lien arises unless the services have been rendered to a boat maritime in character at the time.

* * *

Seamen are entitled to payment of wages lawfully due them, together with a reasonable allowance for their maintenance and cure, if taken ill while in the ship's service, or within a reasonable time thereafter, arising from causes incident to their employment; but the right to cure does not include liability for disease arising from their own vices or gross acts of indiscretion.—ALECTOR, 263 *Federal Reporter* 1007.

* * *

A private wharf, it was held in ALLAN WILDE, 264 *Federal Reporter* 291, may be reserved for private use, and may remain so, even though it may exist on the shores of a navigable river or lake, or in the harbor of a city from which access is obtained directly to the sea.

* * *

Under the federal statute (Comp. Stat. § 9920) providing that it shall not be lawful to tie up or anchor vessels or other craft in navigable channels in such a manner as to prevent or obstruct the passage of other vessels or craft, vessels coming to anchor in navigable channels must see to it that they do not under any circumstances, accidents excepted, obstruct the passage of other craft, and this burden extends not only to actual use of the channel as a place to be at rest, but to the method of anchoring and the movements of the vessel when controlled or affected by her anchor. When a vessel intends, not only to stop in a channel in which she is moving, but to anchor and swing around until she is lying with one-third of her length obstructing the channel, she is bound to give notice to approaching vessels of her movement or intention, or warn them not to approach until she has completed her unusual maneuver. Care to give notice of such movement to other vessels should be commensurate with the danger to them, not only from the actual obstruction of the channel, but from their necessary lack of accurate knowledge of the anchoring vessel's movement and intention. The fundamental rule of safety at sea is that a vessel on seeing another approaching must give notice of any movement out of the ordinary which may control or affect the course or safety of the other vessel.—HESPEROS, 265 *Federal Reporter* 921.

* * *

"With the American revolution," said the court in the case of Marine Railway & Coal Co., Inc., v. United States, 265 *Federal Reporter* 437, "all the rights of the crown and parliament in the navigable waters and the soil under them became vested in the states, subject to the rights surrendered later to the national government by the commerce clauses of the constitution. So sacred is this trust that it has been universally held, not only that a grant of the sovereign to the bed of a public waterway must be in express terms, but it must be with the consent of the legislative department of the government. * * Whatever rights a riparian owner on the banks of a navigable stream may have against individuals, or the unorganized public, or even the general public, as represented by the government, must yield to commercial necessity." It was held that the owners of the land on the west side of the Potomac river, adjoining tide water, could not, by virtue of their title thereto, acquire any title to the soil under the river adverse to that of the state of Maryland, or its successor in interest, the United States.

* * *

"It is the duty of the ship and of her owners, not only to furnish a seaworthy ship and appurtenances at the beginning of the voyage, but to keep both the ship and her appurtenances in this condition. * * * It is the duty both of the owner and of the ship to use due diligence to see that both the ship and her appliances are seaworthy, and if they have used such diligence to furnish a seaworthy ship and appliances, if either the ship or appliances are or may become unseaworthy, and this condition can not be discovered by use of due diligence, then neither the ship nor her owners are liable in damages to the seamen."—Burton v. Greig, 265 *Federal Reporter* 418.

* * *

"Dangers to a towed vessel from ice are regarded like other dangers to navigation—e. g., shoal water impending storm, etc. The tug is bound to exercise due care to avoid injury to her charge from them. * * If the tow directs the dangerous course or movement she can not recover. * * If she assents, with knowledge of the dangers, and is injured, damages are divided, upon the theory that the resulting accident was caused by the fault of both vessels."—PALLAS, 265 *Federal Reporter* 847.

* * *

"Though a service is one which helps to save a vessel endangered at sea, a valid contract by one party to pay at all events, and by the other to receive, either a fixed or a reasonable compensation for such service, is as conclusive as any other valid contract. One who renders such a service under such a contract is in a different position under the law from that of one who voluntarily renders such a service under such circumstances that his only chance of being compensated therefore is in the event of the success of the undertaking. As the divers were employed under a contract which entitled them to recover what their work was reasonably worth, whether it was successful or not, they were not entitled also to a reward, which is allowable when such a service is rendered by a volunteer, who takes the risk of getting nothing in return if nothing is saved."—PARISIAN, 264 *Federal Reporter* 511.

* * *

The director general of railroads, with respect to ships taken over and operated as part of the property of a railroad company, was in every substantial sense a charterer, albeit one who fixed his own terms of hire. "The government paid for the use of the ships, and promised to return them when its need of them had passed. The language of more than one of the war-time acts confirms the common understanding that congress wished to change as little as was possible the former relations between the railroads and the ships, on one side, and those portions of the public which came into contact with them, on the other. It would seem that he may avail himself of the limited liability acts (Rev. Stat. §§ 4282, 4283) to the same extent as a private charterer, and no further."—VIRGINIA, 264 *Federal Reporter* 986.

* * *

The public right of navigation is the dominant right in navigable waters, and this includes the right to use the bed of the water for every purpose which is an aid to navigation.—Rocky Point Oyster Co., Inc., v. Standard Oil Co. of New York, 265 *Federal Reporter* 379.

Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

U.S. Shipyard Slump Is Magnified

Decline in American Work Is Merely Reflection of Worldwide Stoppage—Plants Are in Sound Condition

AMERICA'S shipbuilding industry has as vital an interest in the Washington conference on the limitation of armaments as does the American navy, or any other branch of activity in the United States. It has become patent to American steamship men that stability of overseas trade can not be expected until more of an industrial recovery arises in Europe and the remainder of the world, a recovery that will put exchange back upon a normal basis, and thereby assist the free flow of commerce that will fill the holds of ships. This industrial recovery is intimately related to the question of the limitation of armaments, the discard of the trade restrictions caused by hostile feelings between nations, and the inculcation of friendly relations.

To interpret these generalities into concrete facts would require considerable space, but the negative conditions now existing in the American shipbuilding industry—negative conditions which are reflected throughout the world—are sufficient for the present to prove the necessity for some large worldwide movement to restore peaceful relations. The slump in shipbuilding in the United States is only too well known. A similar slump exists in shipbuilding in England, Japan, and other maritime nations, where the slump is followed by the usual liquidations and failures. America has been peculiarly fortunate in that she has not been compelled to record such unusual lists of failures among the shipbuilding corporations.

Overplay American Slump

Foreigners have been prone to emphasize the slump in American shipbuilding—it is an easy way to be optimistic over their own enterprise. For instance, British agencies report that England's current shipbuilding represents over 3,000,000 tons, an amount nearly eight times the tonnage building in the United States. That looks very well for England, but not nearly so favorable as they would have the world believe, when the figures are submitted to analysis. The British figures, while representing contracts placed for construction, do not represent merely construction on which work is actually proceeding. Included in the aggregate of more than 3,000,000 gross tons are about 1,200,000 tons on which building has been suspended or postponed. In addition, statistics of the launchings on the Clyde show that British shipbuilding activities have fallen off from 25 to 30 per cent, as figured upon the production figures of the first nine months of the current calendar year. Furthermore, the Clyde shipbuilders say that they "are quoting bare cost figures for new business, allowing nothing for profit, while others in order to keep the yards running and hold their forces intact, are laying down keels on speculation and facing the probability that they will receive not more than 10 shillings for every 20 shillings spent."

According to advices from Italy, the Italian government has extended the subsidy it offered to shipbuilders. The expiration date was June 30, 1921. Some shipbuilders could not finish ships at that time. The government saw an opportunity through extension to relieve unemployment. It is further said the government is fostering a bill for the expenditure of 200,000,000 lire for further subsidizing Italian passenger and cargo steamers built in Italy or reconverted there.

New Orders Held Up

Thus it is evident that the shipbuilding industry throughout the world is languishing. The American situation merely reflects world conditions. Practical steamship owners believe that this world slump is not due to the overtonnaging of the world, a claim which has been successfully denied by authorities, but largely to the uncertainty relative to shipping conditions which may likely exist under various national flags within the next few years. Or, stated simply, the political uncertainty throughout the world is the cause. For instance, the Red D Line, which recently asked for bids on two passenger boats, has let it become known that the boats will not be built until the shipping board gives some assurance as to whether or not the provisions of the Jones act are to be enforced. America has a shipping law which is destined to encourage the American merchant marine and it merely remains to have that law put into effect.

Many well established American lines are in need of new tonnage, but it is unreasonable to expect these to be built until the lines have some assurance from Washington that the government is going to carry out its maritime promises. Among the important shipbuilding activities held in abeyance passenger vessels predominate. The case of the Red D Line is merely an incident in point.

While awaiting for the clear-cut decision from Washington, the American shipbuilding industry must content itself with repair work, which is rather abundant. But with the release of various shipbuilding yards from construction work, the facilities for repairs become proportionately larger and competition for the jobs that much keener. The Atlantic Coast Shipbuilders' association some time back realized the necessity of including strictly repair yards among its membership and considerable progress has been made, especially during the past month, in recruiting this new membership. Commenting on this activity, the association says:

"The day when a single individual, firm or corporation could stand on its own feet, alone and apart from its competitors, has passed, and no organization, regardless of its magnitude or its extensive business contact, can live within itself and continue to draw inspiration from the isolated foundations of its early success. It is the combination of men with similar aims into an effective entity that makes for progress, and when this fundamental truth is nationally recognized, American business will forge ahead with greater speed than was ever before thought possible."

Bid on Leviathan

With the approval of Joseph W. Powell, president of the Emergency Fleet corporation, bids have been called for on reconditioning the LEVIATHAN. The refitting of this ship will be one of the largest contracts of a maritime nature ever let in the United States. The cost of reconditioning is variously estimated between $4,000,000 and $8,000,000, and the work will take more than a year to complete.

One of the largest tasks in connection with putting the LEVIATHAN afloat in first class shape has been accomplished. This was making a complete set of plans and specifications of the ship, a job which required

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

measuring by hand every dimension of the ship, tracing the course of every torn out pipe or wire, mapping out every recess of her vast coal bunkers and, in general, reducing the facts of the greatest ship that has ever sailed the seas to a mass of detailed information on paper. The Germans were willing to give up the plans of the great ship for $1,000,000, but a force of American draftsmen, after months of hard work under William F. Gibbs, chief of construction of the International Mercantile Marine Co., succeeded in redrawing the liner at much less expense. How valuable these plans are and how costly, may be seen from the fact that firms considering bidding for her reconditioning are required to deposit $100 for each complete set required.

According to the announcement, bidders are required to state a lump sum price for which they will accomplish all of the work specified. Bids will be received at the office of Mr. Gibbs, who is the official of the International Mercantile Marine Co., the agent of the shipping board, in charge of the ship, at 9 Broadway, New York, up to Dec. 29, when they will be opened publicly. The right to reject any or all bids is reserved.

Will Sell Surplus Goods

Of special interest to repair yards and shipbuilders, who are interested in bringing about a stabilization of the industry and a restoration of normal activity, is the announced intention of the Emergency Fleet corporation to dispose of $35,000,000 worth of shipbuilding material at private sale, "without red tape." The original purchase price of this material was $125,000,000, but its present appraised value is approximately $35,000,000. Sales headquarters have been established at South Norwalk, Conn.; Hog Island, Pa.; Chicago; New Orleans; Alameda, Cal.; St. Johns, Portland, Oreg., and Tacoma, Wash.

The aim of the Emergency Fleet corporation as outlined in this policy, has been to remove all restrictions and limitations which have tended to make difficult the purchase of government owned supplies by the general public, corporations, or others not thoroughly familiar with usual government requirements. Each of the district directors of sales will be authorized to make cash sales of property in amounts not exceeding $5000. The intention is to make it just as easy to purchase from one of the Emergency Fleet stores in quantities not exceeding this amount as it is from the usual corner grocery store. Where the materials run into values greater than $5000, approval by the manager of the material sales division, located in Washington, will be necessary but the organization will be such as to permit immediate action on such purchases.

Government Work Nears End

With the delivery of the last ship built for the Emergency Fleet corporation, a combination passenger and cargo boat, next March, with the reconditioning of the LEVIATHAN, and with the sale of surplus property, the day when the government will have withdrawn from the shipbuilding industry rapidly approaches. When that day has arrived, the recovery of the American shipbuilding industry from the lethargy it has been thrown into by after-the-war conditions may be confidently predicted. In the meantime, shipbuilding proceeds under considerable handicaps.

The Merchant Shipbuilding Corp., yard at Chester, Pa., delivered the 10,000-ton tank ship, ROBERT E. HOPKINS, and launched the sister tank ship, SAMUEL Q. BROWN, last month, both for the account of the Tidewater Oil Co., New York. Two 11,000-ton freighters, being built for the American-Hawaiian Steamship Co., at this yard, will be launched about the middle of November. The Merchant Shipbuilding Corp. is reputed to have "passed the corner" in the shipbuilding depression and sufficient work is in sight to keep the present staff consistently employed.

On the other hand the American Shipbuilding Co., operating a yard at Brunswick, Ga., has become involved and a petition in bankruptcy has been filed against it. The firm has no connection with the big lake firm of the same name.

The Robins Dry Dock & Repair Co.'s plant of the Todd Shipyards Corp., New York, has placed 500 men at work on the ex-American liner, ST. LOUIS, and the work of actual reconditioning this famous ship for the Anderson Overseas Corp. has begun. The work is to be completed and the ship delivered in January, as the new owner intends to send her around the world with exhibits of American manufactures.

The ST. LOUIS will be converted into an oil burner by the installation of Todd burners, and will be equipped with every modern device for the comfort and safety of her passengers. Some changes will be made in the cabin arrangements. Because of the climatic conditions to be met with during the 11-month cruise, a ventilation system which will serve all the inner and lower rooms in hot countries, and a heating system which will make the rooms and quarters comfortable in cold countries, will be installed. The exhibition deck will have uninterrupted space of about 550 feet long for exhibits. A special section will accommodate practically a whole automobile show.

Bethlehem, Says Report, Seeks Los Angeles Yard

The Bethlehem Shipbuilding Corp., Bethlehem, Pa., is reported as considering the purchase of a plant at San Pedro, Cal., for manufacturing an American type of the diesel engine, for installation in a number of hulls, now at the plant of the Bethlehem company in San Francisco, which are to be converted into motorships. H. J. Smith, assistant to Charles M. Schwab, accompanied by R. E. McMath, secretary of the Bethlehem corporation, Joseph J. Tynan, general manager of the Union Iron Works plant of the Bethlehem corporation at San Francisco; A. L. Gunn, assistant general manager, and Arnold Foster, treasurer of the Union plant, spent the greater part of the week ended Oct. 21, in Los Angeles, going over the situation there and framing a report. Among the companies mentioned are the Los Angeles Shipbuilding & Drydock Co. and the Southwestern Shipbuilding Co. M. H. Hellman, representing the owners of the latter plant, said: "Negotiations are pending for the sale of this property, but the transaction has not been closed." Erle M. Leaf, vice president of the Los Angeles Shipbuilding & Drydock Co. denied that this company had entered into any negotiations for the sale of its properties to the Schwab interests.

Cuts Day Rate Wage

The Merchant Shipbuilding Corp., Chester, Pa., has made a reduction of approximately 10 per cent in the present day rate classifications, in order to meet conditions existing in the shipbuilding and allied industries. The piece work price lists, agreement price lists and subcontracts were not changed. This reduction was made effective Oct. 22.

Two new American-Hawaiian Steamship Co. vessels have been named the CALIFORNIAN and MISSOURIAN. Their namesakes were sunk during the war. The MISSOURIAN was sunk in the Mediterranean, and the CALIFORNIAN off the north coast of France. They are being built for the steamship company of the United American lines by the Merchant Shipbuilding Corp., Chester, Pa.

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Mexico Plans To Improve Two of Her Ports

Extensive improvements at the ports of Guaymas, on the Gulf of California, and at Manzanillo, on the Pacific shore of the state of Colima, are announced by the Mexican federal government, and opportunity is offered for the furnishing of equipment and supplies by American firms. The Guaymas work consists of a new concrete and steel mole, to cost between $250,000 and $300,000. The work is being done by Mexican army engineers under direction of Commander Azueta, of the Mexican navy, but the material and equipment is to be purchased in the United States.

Guaymas is one of the most important ports in Mexico, being second only to Vera Cruz. It supplies almost all of northwestern Mexico, and much of the states of Coahuila and Nuevo Leon, in the northern part, with some trade going into Sinaloa, on the south. It has a land-locked harbor, not unlike that of San Francisco in shape and depth, but much smaller. A self-scouring channel, more than 40 feet deep at mean low tide, leads into the harbor of Guaymas from the Gulf of California, and the port is now a point of call for virtually all steamship lines plying up and down the west coast of both Americas.

The improvements to be done at Manzanillo are in reality the resumption of work contracted for back in 1908-09 by the government of the then President Porfiro Diaz, with Col. Edgar K. Smoot, an American engineer, resident in Mexico City. The work was first resumed last April, under direction of the government of President Alvaro Obregon, which confirmed Colonel Smoot's contracts, but labor troubles intervened, and it is only recently that these have been settled and that plenty of men have been obtainable. The original cost of the port improvements of Manzanillo was approximately $8,000,000 in gold, and more than $4,000,000 is needed to complete it.

The new United States revenue cutter Modoc was launched recently from the yards of the Union Construction Co., at Oakland. The Modoc is the fourth ship of her class to be built at the Oakland plant and will be used for coast defense.

Engineers Discuss Big St. Lawrence Project

The St. Lawrence ship canal and power project is to be the subject of a joint meeting of the New York sections of the four national engineering societies to be held in New York Nov. 14. The societies, the American Society of Civil Engineers, the American Society of Mechanical Engineers, the American Institute of Mining and Metallurgical Engineers and the American Institute of Electrical Engineers, are co-operating in a joint committee of arrangements, presided over by W. L. Saunders. Speakers will include advocates of the project, invitations issued including Herbert Hoover, former head of the American Engineering council and now secretary of commerce.

During August, 722,000 tons of freight, incoming and outgoing, were handled over the wharves of San Francisco, according to figures just made public by Frederick S. Knight, chief wharfinger of the California state board of harbor commissioners. This was the record month for 1921 to date and was an improvement over August, 1920.

What Pacific Shipyards Are Doing

IN COMPETITION with Canadian yards and Canadian exchange, Todd Dry Docks, Inc., Seattle, obtained the contract for making extensive repairs to the American-Hawaiian liner ARIZONAN which went ashore near the international boundary. The ARIZONAN sustained serious damage and will have 10 bottom plates renewed in addition to repairing frames, etc. The Seattle firm bid $42,900, 25 days time as against $54,000 and $55,000, 20 days, by Canadian yards. The vessel was first docked at Victoria, B. C., following the accident.

Todd Dry Docks, Inc., following the award of several other contracts, are employing 650 men at present, the largest number in several months. These contracts include repairs to the Alaska liner ADMIRAL WATSON, which sustained hull damage by running aground. The Oriental liner KEYSTONE STATE is also having structural and interior changes made, in addition to overhauling, prior to returning to service. This job involved expenditure of about $50,000. The same yard recently completed a $200,000 job on the steamer WENATCHEE which is now in the Orient and has made a creditable showing since she left this yard.

On Oct. 12, the Canadian government carrier CANADIAN FREIGHTER was launched from the Coughlan plant, Vancouver, B. C. This vessel is of the 8350-ton type, single screw and has 9000 cubic feet of refrigerated space. This completes the present building program of the Canadian government.

John McAteer, veteran Puget sound wood shipbuilder, recently died at his home in Seattle. Mr. McAteer was engaged in shipbuilding on Puget sound for more than 30 years. During the war, he operated his own yard and built a number of wooden vessels for Norwegian interests.

After a long investigation, surveyors and underwriters have concluded that a broken scupper pipe was the cause of the mishap to the Canadian freighter CANADIAN IMPORTER. This vessel was mysteriously flooded while enroute to Australia and was towed 650 miles from sea to Victoria where she is now being repaired. The broken pipe was 4 inches in diameter and had a split 2½ inches long which, under test, permitted 1 ton of water to enter the ship without pressure every 20 minutes.

At the plant of the Todd Drydock & Construction Co., Tacoma, Wash., work of completing the three navy scout cruisers is proceeding slowly owing to retrenchment of government funds. It was planned to deliver the first of these vessels this year but under present plans delivery will be delayed until the spring of 1922. This yard is still disposing of its surplus equipment including plates, bars, shapes and angles and other material.

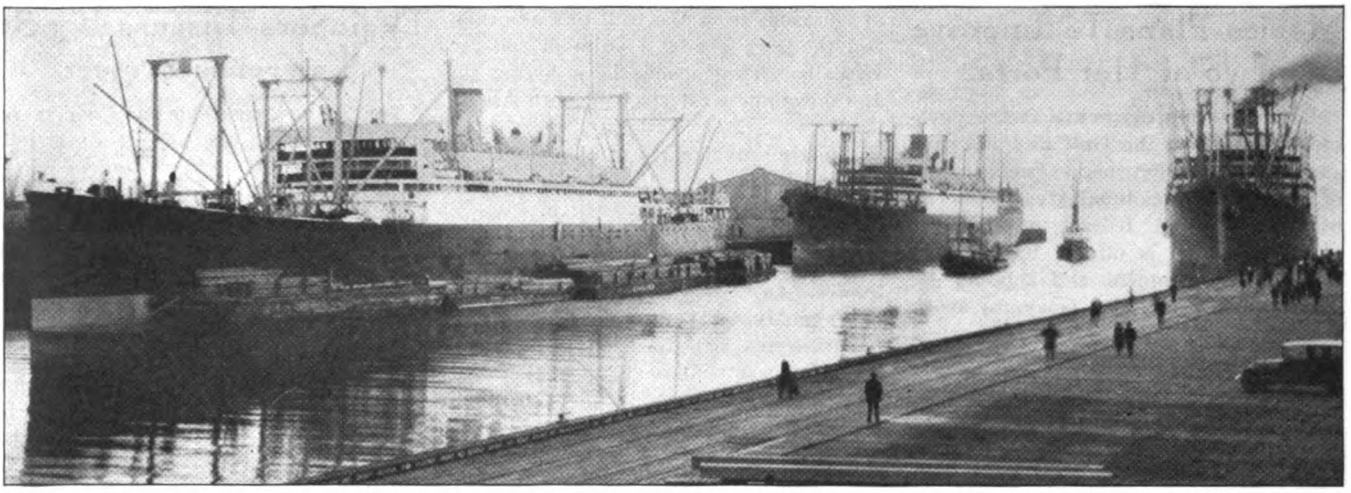
Negotiations between J. J. Coughlan and Clarence Wallace, Vancouver, B. C., and the Dominion government regarding a subsidy for a drydock on Burrard inlet, near Vancouver, are reported concluded. The Burrard Drydock Co., Ltd., has been incorporated by Mr. Coughlan and Mr. Wallace. The cost of the improvement is estimated at $2,500,000.

R. D. Caney has been placed in charge of the Emergency Fleet corporation surplus supplies at Tacoma and will conduct sales to dispose of between $4,000,000 and $5,000,000 of equipment consisting of boilers, boats, rope, paint and other vessel fittings. Sales under $5000 will be concluded by the Tacoma office direct.

The Canadian government has awarded for $30,000 a contract for a new lighthouse at Carmanah Point, Vancouver island.

Officials of the Norway-Pacific Construction & Drydock Co., Everett, Wash., have been allowed until Dec. 15 to find means of financing the yard before final judgment is entered to close up the business. This plant has been unable to operate because of financial difficulties, although it has been ready for business for many months.

Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



THE FLEET COUNTED ON TO WIN BACK AMERICA'S SHARE OF THE NORTH PACIFIC PASSENGER TRADE

Three of the five big shipping board liners with which the Admiral line, Seattle, has inaugurated the all-American Puget Sound-Oriental passenger and freight service are shown above in one slip of Pier B, of the Seattle port district, the largest commercial wharf in the world. These three 535-foot vessels represent an expenditure of $25,000,000 and are superior to any others, American or foreign, afloat upon the Pacific. The SILVER STATE (left) and the KEYSTONE STATE (center), the sister ships of the WENATCHEE (right), which completed the group of three at the Seattle wharf, both broke Pacific coast records for speed on their trips from the Atlantic coast to Seattle, to go into the new service, the SILVER STATE making the best record. Her time between New York and San Francisco was 12¾ days, the best previous record being 14 days. She made the run from San Francisco to Seattle in 45 hours flat, beating the previous record by 2 hours and 10 minutes. The BAY STATE and the PINE TREE STATE will be added to the fleet

Fit Out Liner for World Trade Cruise

WORK is going forward at the Robins Dry Dock & Repair Co.'s plant in Erie Basin, Brooklyn, to get the transatlantic liner ST. LOUIS in readiness for her world trade cruise, beginning in January, 1922 and ending the following December. During that time she is expected to carry the exhibits of 300 to 350 American manufacturers into the four quarters of the globe.

The contract for conditioning the ST. LOUIS was made early in October between the Todd Shipyards Corp. and the Anderson Overseas Corp, New York, owner of the vessel. The cost will run into many thousands of dollars. The contract calls for having the ship complete and ready for sea in time for her to sail as per schedule in January.

According to the specifications of the contract, the ST. LOUIS will be converted into an oil burner and will be equipped with every modern device known for the comfort and safety of her passengers. The arrangement of the ship will differ to some extent from what it was at the time when she was the crack ship of the American line. Because of the climatic conditions to be met during the 11 months' cruise, a ventilation system which will serve all the inner and lower rooms in hot countries, and a heating system which will make the same rooms and quarters comfortable in cold countries, has been fully arranged for.

A fully equipped hospital, with isolation ward, operating room, etc., is also included in the plan. On account of one entire deck having been reserved for exhibition purposes, as well as portions of three other decks, great care had to be exercised so that the comfort and safety of the passengers would not be interfered with. One exhibition deck, however, will have uninterrupted space for exhibits of about 550 feet long. This does not include the automobile section, which will carry practically an automobile show around the world.

The Anderson Overseas Corp. states that accommodations and space on the ST. LOUIS for the world trade cruise are being actively taken, most of the large cities in the United States having taken a keen interest in the project with the aim of having their industries well represented and their cities advertised.

The ST. LOUIS was the first 100 per cent all steel American steamer ever built, and at the time was the fastest ship afloat. She was christened by the former Mrs. Grover Cleveland at the yards of the William Cramp & Sons Ship & Engine Building Co., Philadelphia, President Cleveland and his cabinet attending.

Over a measured course she averaged 22 knots an hour. The term "ocean greyhound," was coined to describe her. In 1898, the ST. LOUIS rescued the passengers and crew of the Dutch steamer VEENDAM 640 miles from Southampton. Due to her swiftness, she became an auxiliary cruiser during the Spanish-American war, and one of her achievements was the finding and cutting of the telegraph cables to San Juan de Puerto Rico, Santiago de Cuba and Guantanamo. She was engaged in this work until the Spanish armada appeared off Santiago, sailed in and found themselves bottled up, and communication with Madrid cut off. She was present at the action incident to the attempt Admiral Cervera made to take his fleet out of Santiago harbor, and after this seabattle took Admiral Cervera and his officers aboard and conveyed them to Portsmouth, N. H.

From 1914 until the beginning of the world war the ST. LOUIS made regular trips between American and English ports, and in 1917, shortly after Germany's declaration that open warfare was to be carried on against any ships between certain restricted areas, she took the first American guns to Europe.

She had a taste of almost every kind of naval warfare from 1914 up to 1918, when she was taken over by the government for operation by the cruiser and transport force, and her name temporarily changed to LOUISVILLE, to avoid confusion with the U. S. S. ST. LOUIS.

German merchant ships will fly a new rectangular flag divided horizontally into three equal stripes, black, white, and red. In the black stripe next to the staff, are inserted the national colors, black, red and yellow, divided from the black stripe by an outer vertical edge of white. The length of the insertion is equal to the depth of the black stripe. Merchant vessels commanded by retired naval officers use the merchant flag superimposed with an iron cross. According to existing regulations, it will be permissible for German merchant ships to fly the old or the new German merchant flag at will up to Jan. 1, 1922.

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Late Flashes On Marine Disasters

Brief Summaries of Recent Maritime Casualties— A Record of Collisions, Wrecks, Fires and Losses

Name of Vessel	Date	Nature	Place	Damage Resulting
Aslaug Haaland	Oct. 18	Disabled	St. John, N. F.	Prop. blades lost
Annie M. Murphy	Oct. 8	Disabled	Key West	Sails lost
Avalon	Oct. 8	Severe gale	Sable Island	Sails lost
Ansaldo III	Sept. 26	Fire	Genoa	Not stated
Ardmore	Oct. 5	Disabled	Key West	Machy. disabled
Arizonan	Oct. 4	Grounded	San Juan Island	Leak. badly
Alameda	Oct. 23	On rocks	Seward, Alaska	Not stated
Ada M. McIntyre	Oct. 19	Ashore	Straits of Conso	Bottom damaged
Algiers	Oct. 19	Fire	Texas City dock	Plates damaged
Araminta	Oct. 15	Ashore	Harbor Grace	Total loss
Auditor	Oct. 14	Disabled	South pass	Not stated
Asuncion de Larrinaga	Oct. 20	Collision	Galveston	Leaking
Adela	Oct. 7	Fire	St. Vincent	To cargo
Anna M. Hudson	Oct. 27	Beached	Tampa	Slight
Asier	Oct. 27	Disabled	Tampa	Prop. broke
A. E. R. Schneider	Oct. 11	Grounded	St. Clair canal	Undamaged
Ashland	Oct. 15	On rocks	Cardinal canal	Bad leak
Alpena	Oct. 16	Grounded	Near Peeche Island	Not stated
Anna C. Wilson	Oct. 17	Ashore	Gull Island Shoal	Bottom damaged
Anandale	Oct. 31	Disabled	Charleston, S. C.	Lost sails
Albert W. Robinson	Oct. 29	Disabled	At sea	Rudder lost
British Lantern	Oct. 9	Collision	Whitsand Bay	To hull
Bushu Maru	Sept. 19	Fire	Medan	Cargo damaged
Berengaria	Oct. 17	Grounded	Red Hook Flats	Not stated
Bagdad	Oct. 17	Disabled	Key West	Pumps disabled
Bastian	Oct. 25	Ashore	Fogo	Leaking
Bessie J	Oct. 27	Stranded	Tampa	Not stated
Brantford	Oct. 26	Ashore	Thorold	Leaking
Brelfond	Oct. 29	Disabled	La Rochelle	Prop. damaged
Clan Malcolm	Oct. 9	Collision	North Channel	Slight
C. K. Billings	Oct. 18	Grounded	Little Sturgeon	Jettis. cargo
Chemiston	Oct. 17	Disabled	Falmouth	Bow, stem damaged
Commodore Rollins	Oct. 24	Disabled	Norfolk	Prop. trouble
Canadian Sailor	Oct. 1	Grounded	River Avon	To rudder, plates
C. C. Wehrum	Oct. 27	Beached	Tampa	Slight
Charles R. Wiebe	Oct. 27	Beached	Tampa	Slight
C. E. Redfern	Oct. 27	Leaking	Kelleys Island	Slight
Celestial	Nov. 1	Disabled	River Clyde	Lost rudder
Dixiana	Oct. 13	Disabled	St. Johns, N. F.	Prop. trouble
David Evans	Oct. 19	Beached	Near South Africa	Not stated
Dove	Oct. 23	Heavy weather	St. Johns, N. F.	Slight
Eastern Belle	Oct. 2	Grounded	Cork harbor	Broke rudder
England Maru	Oct. 21	Collision	Taku	Sank
Eleanor F. Bartram	Oct. 20	Heavy weather	Jacksonville	Leaking
Estelle	Oct. 19	Disabled	Norfolk	Prop. lost
Eastern Admiral	Oct. 11	Broke down	Near Alexandria	Not stated
Erie Maru	Oct. 24	Lost anchor	Hampton Roads	Not stated
E. T. Bedford	Oct. 31	Disabled	At sea	Lost prop. blade
Fort Gaines	Oct. 6	Fire	Erie Basin drydock	To engine room
Fukuyo Maru	Oct. 26	Collision	Staten Island	To hull
Frederick Luckenbach	Oct.28	Disabled	Tampa, Fla.	Water in hold, eng. disabled
Favorite	Oct. 27	Foundered	Tampa	Total loss
F. D. Asche	Oct. 27	Ashore	Manatilla Reef	Not stated
Fukui Maru	Oct. 27	Hurricane	Off Washington	Sank
Glendola	Oct. 16	Disabled	Bermuda	Boils.leaking
Gdansk	Oct. 20	Collision	At sea	Not stated
Halliartus	Oct. 12	Fire	Montevideo	Not stated
Hayden	Sept. 9	Disabled	Ponta Delgada	Pump trouble
Hayden	Oct. 5	Disabled	Off Delaware Capes	Not stated
Hoxbar	Oct. 21	Disabled	Norfolk	To cylinder head
Henry F. Kreger	Oct. 26	Wrecked	Pollock Rip Shoals	Total loss
Hopkins	Oct. 26	In tow	St. Michaels	Boil. trouble
Horace M. Bickford	Nov. 1	Disabled	Charleston	Sails lost
Imprimus	Oct. 7	Disabled	At sea	Abandoned
John D. Archbold	Oct. 22	Disabled	Tompkinsville, S.I.	Eng. trouble
Joseph F. Bellows	Oct. 17	Disabled	Norfolk	Rudder damaged
Julius Kessler	Sept. 19	Disabled	St. Michaels	Valve trouble
Jean and Mary	Oct. 7	Gale	Near Turks Island	Leaking
Johns County	Oct. 16	Disabled	Bahia	Boil. trouble
John Francis	Oct. 27	Beached	Tampa	Slight
Jubilee	Oct. 27	Beached	Tampa	Slight
Joseph Block	Oct. 29	Ashore	Near Mackinac Island	Leaking
J. W. Somerville	Oct. 31	In tow	Key West	Capsized
Kewanee	Oct. 24	Disabled	Key West	Prop. trouble
Kroonland	Oct. 23	Heavy weather	At sea	Broken prop. shaft
La Crosse	Oct. 6	Ashore	Chanak	Not stated
Lom	Oct. 18	Lost anchor	Hampton Roads	Not stated
Lake Fackler	Oct. 20	Disabled	Boston	Boil. & pump trouble
Lilly B	Oct. 8	Adrift	Cape San Blas	Not stated
Lenape	Oct. 11	Sank	North River	To engine & fittings
Lubrico	Oct. 5	Ashore	Patridge Point	Water in hold
Luis Urguijo	Oct. 15	Fire	Valencia, Spain	Not stated
Lake Elsmere	Oct. 24	Fire	Off Charleston	Not stated
Lake Falama	Oct. 25	Disabled	Cienfuegos	Eng. trouble
Lima	Oct. 24	On rocks	Straits of Magellan	May be total loss
Lodovica	Oct. 20	Collision	Galveston	Stern twisted
Lake Fillmore	Oct. 27	Grounded	Tampa	Not stated
Lake Galisteo	Oct. 29	Disabled	Cape San Antonio	Lost prop.
Lurline	Oct. 1	Disabled	At sea	Eng. trouble
Maplefield	Oct. 13	Storm	Florida Coast	In tow
Mildred G. Myers	Oct. 17	Driven ashore	Canadian Labrador	Total loss
Mary H. Hirtle	Oct. 10	Grounded	Provincetown, Mass.	Undamaged
Martha Woermann	Sept. 19	Fire	Lagos	Unknown
Minnie	Oct. 12	Disabled	Beaufort, N. C.	Bow damaged
Mongolia	Oct. 8	Fire	Off Tampico	Not stated
Margaret	Oct. 25	Sank	Thimble Shoals light	Total loss
Massick	Oct. 27	Disabled	Near Sandham	Eng. disabled
Manitowoc	Oct. 29	Disabled	Off Stapleton	Steerer disabled
Maracaibo	Oct. 29	Collision	Near Brooklyn	Bow damaged
Monhegan	Oct. 27	Struck carfloat	New York Harbor	Bow damaged
Manatee	Oct. 31	Fire	At sea	Not stated
Mexico	Oct. 23	Lost anchor	North sea	Not stated
Norman Bridge	Oct. 9	Disabled	Jacksonville	Boil. trouble
Nashaba	Oct. 1	Grounded	Pluckington Bank	Not stated
Navahoe	Oct. 9	Grounded	Port Arthur Channel	Not stated
Ninon L	Oct. 17	Leaking	Bermuda	Not stated
Otta	Oct. 18	Disabled	St. Johns, N. F.	Rudder stock broke
Osceola	Oct. 30	In tow	Key West	Dismasted
Pictou	Oct. 19	Disabled	Edgemoor	Not stated
Protector	Oct. 8	Ashore	Lamaline	May be total loss
Pennsylvania	Oct. 12	Grounded	Port Arthur Canal	Not stated
Paco Figueras	Oct. 12	Fire	Trieste	Not stated
Phoebe Crosby	Oct. 17	Grounded	Georgetown	May be total loss
Perry Setz	Oct. 20	Towed in port	Norfolk	Not stated
Prince Arthur	Oct. 25	Ashore	Yarmouth Harbor	Water in hold
Patricia	Oct. 25	Disabled	New York	Leaking
Prometheus	Oct. 29	Collision	Near Brooklyn	Unknown
Persian	Oct. 28	Heavy weather	Jacksonville	To cargo
Queen Louise	Oct. 20	Disabled	Bermuda	Pump disabled
Rowan	Oct. 9	Collision	North Channel	Sank
Royal	Oct. 13	Ashore	Cape Race	Total loss
Robert Rhodes	Oct. 23	Hit gate	Welland Canal	Not stated
Rovear	Oct. 31	Disabled	Halifax	Machy. trouble
Soestdijk	Oct. 6	Fire	Newport News	Not stated
Santa Elena	Oct. 5	Touched bottom	Channel Patch	Undamaged
Salle Persis Noyes	Oct. 8	Grounded	Boston	Not stated
Santa Clara	Oct. 20	Missing	At sea	Not stated
Schuylkill Bridge	Oct. 18	Disabled	Halifax	Eng. trouble
Sirio	Oct. 8	In tow	Hampton Roads	Prop. lost
Springfield	Oct. 17	Disabled	Five Fathom Bank Lightship	Steerer disabled
S. B. Hunt	Oct. 24	Stormy weather	At sea	Taking water
Sehome	Oct. 26	Waterlogged	At sea	Abandoned
Spokane	Oct. 20	Disabled	Carter Bay	Prop. damaged

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Late Flashes On Marine Disasters

Brief Summaries of Recent Maritime Casualties—
A Record of Collisions, Wrecks, Fires and Losses

Name of Vessel	Date	Nature	Place	Damage Resulting
Seth Wyman	Oct. 3	Grounded	Southwest Harbor, Me.	Total loss
Sierra	Oct. 27	In tow	Astoria	Eng. shaft broke
Squanto	Oct. 28	Ashore	Beck's Rock	Not stated
Santa Theresa	Oct. 31	Collision	Off Ambrose Channel	Plates damaged
Tennessee	Oct. 1	Sank	Port Costa	Not stated
Thames	Oct. 26	Hurricane	N. of Jupiter	Sank
Taketoyo Maru	Oct. 26	Collision	Staten Island	Undamaged
Truxillo	Oct. 27	Disabled	Tampa	Steerer broke
Thomas B. Garland	Oct. 27	Stranded	Tampa	Not stated
Vincennes Bridge	Oct. 20	Disabled	Haaks Light Vessel	Defective condenser
Vincent A. White	Oct. 15	Disabled	Vineyard Haven	Lost jibs & sail
Virginia	Nov. 1	In tow	Tortugas	Dismasted
Venezuela	Oct. 30	Collision	San Pedro	Slight
West Cahokia	Oct. 7	Disabled	Seven Foot Knoll	Fuel pipe disabled
West Camak	Oct. 9	Collision	North Channel	Water in forepeak
West Erral	Oct. 8	Disabled	Galveston	Tail shaft trouble
Wathena	Oct. 21	Leaking	Trelleborg	To cargo
Wichita	Oct. 8	Disabled	Near Norfolk	Boil. trouble
W. H. Reed	Oct. 15	Ashore	Rhode Island	Not stated
West Keats	Oct. 28	Disabled	At sea	Eng. trouble

Marine Business Statistics Condensed

Lake Erie Receipts

Out of a total of 3,233,081 gross tons shipped from upper lake ports in October, Lake Erie ports received 2,103,940 tons, as shown by figures compiled by Marine Review. Balance on dock Nov. 1 was 9,672,077 tons against 10,212,975 tons on Nov. 1, 1920. Detailed figures are:

Port	Gross tons
Buffalo and Port Colborne	173,515
Erie	75,025
Conneaut	663,108
Ashtabula	211,064
Fairport	157,953
Cleveland	380,036
Lorain	202,440
Huron	100,224
Toledo	92,508
Detroit	48,067
Total	2,103,940

Lake Michigan Receipts

Receipts of ore at Lake Michigan ports in October were 1,174,888 gross tons as shown in the following record by ports:

Port	Gross tons
South Chicago, Ill.	499,448
East Jordan, Mich.	10,892
Boyne City, Mich.	.....
Milwaukee	.....
Indiana Harbor, Ind.	176,686
Gary, Ind.	487,862
Total	1,174,888

Soo Canal Report

Traffic through the Soo canal in October aggregated 6,652,395 net tons of freight, of which 4,943,351 tons was eastbound and 1,709,044 tons was westbound. The American canal handled 6,177,010 tons and the Canadian canal 475,385 tons.

Official regulations delayed the release of the September record. These restrictions have now been raised and the following tables show both the October and September records. Below is the record of freight passed through the canal during October and September for the past seven years:

	Net tons
October, 1921	6,652,395
October, 1920	13,000,299
October, 1919	9,713,319
October, 1918	13,363,287
October, 1917	12,646,066
October, 1916	9,116,196
October, 1915	11,557,851
	Net tons
September, 1921	6,482,071
September, 1920	11,748,131
September, 1919	10,202,917
September, 1918	12,400,073
September, 1917	13,544,686
September, 1916	12,906,524
September, 1915	10,979,451

The following tables show the complete Soo canal traffic including first, the record to Oct. 1, and second, the record up to Nov. 1:

EASTBOUND

	To Oct. 1, 1921	To Oct. 1, 1920
Lumber, M. ft. B. M.	156,066	157,646
Flour, barrels	5,360,870	4,571,912
Wheat, bushels	75,830,015	50,724,199
Grain, bushels	63,572,118	29,542,026
Copper, net tons	14,574	34,185
Iron ore, net tons	18,981,467	42,295,119
Pig iron, net tons	526	212
Stone, net tons	17,910	45,162
Gen'l merchandise, net tons	48,350	37,447
Passengers, number	29,102	33,063

WESTBOUND

Coal, soft, net tons	10,761,200	7,417,138
Coal, hard, net tons	1,780,569	1,301,983
Iron ore, net tons	.....	99,403
Mfg. iron and steel, net tons	21,791	53,584
Salt, net tons	39,205	75,285
Oil, net tons	267,734	268,285
Stone, net tons	362,575	367,491
Gen'l merchandise, net tons	327,078	363,822
Passengers, number	30,445	34,010

SUMMARY

Vessel passages, number.	8,920	13,681
Registered tonnage, net.	23,529,700	41,787,770
Freight:		
Eastbound, net tons	23,498,113	45,410,347
Westbound, net tons	13,560,152	9,946,991
Total freight, net tons	37,058,265	55,357,338

EASTBOUND

	To Nov. 1, 1921	To Nov. 1, 1920
Lumber, M. ft. B. M.	178,783	182,820
Flour, barrels	6,228,680	5,714,903
Wheat, bushels	113,287,236	79,194,895
Grain, bushels	70,012,809	36,740,337
Copper, net tons	17,896	40,884
Iron ore, net tons	22,078,786	50,951,942
Pig iron, net tons	526	462
Stone, net tons	17,910	65,344
Gen'l merchandise, net tons	54,351	41,055
Passengers, number	29,142	33,512

WESTBOUND

Coal, soft, net tons	11,964,566	9,911,045
Coal, hard, net tons	2,059,226	1,678,371
Iron ore, net tons	.....	127,067
Mfg. iron and steel, net tons	26,740	60,689
Salt, net tons	51,478	93,340
Oil, net tons	295,946	314,134
Stone, net tons	461,237	463,367
Gen'l merchandise, net tons	357,417	422,636
Passengers, number	30,570	34,385

SUMMARY

Vessel passages, number.	10,130	16,426
Registered tonnage, net.	27,629,214	50,818,574
Freight:		
Eastbound, net tons	28,018,665	55,286,988
Westbound, net tons	15,216,610	13,070,649
Total freight, net tons	43,235,275	68,357,637

October Ore Shipments

Shipments of iron ore from the Lake Superior district continued to reflect through October the depression which has marked every month during the navigation season. Ore moved last month aggregated only 3,233,081 gross tons, a decrease of 5,615,905 gross tons from the record of October 1920. So far this year, only 21,894,275 gross tons have been carried against 53,122,342 gross tons up to Nov. 1, 1920. Detailed figures follow:

Port	October, 1921	To Nov. 1, 1921
Escanaba	405,554	1,719,885
Marquette	259,491	719,293
Ashland	335,180	2,183,108
Superior	655,915	4,833,413
Duluth	1,188,926	9,164,803
Two Harbors	388,015	3,273,773
Total	3,233,081	21,894,275
1921 decrease	5,615,905	31,228,067

Generated on 2024-08-28 00:03 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Marine Business Statistics Condensed

Record of Traffic at Principal American Ports for Past Year

FOR the first time in several months, ocean shipping at American ports in October showed an improvement which appeared to be based upon solid business. Entrances and clearances at most of the ports registered larger tonnage as well as a greater number of ships, most of them, however, being foreign bottoms.

Entrances and clearances through the port of New York showed a marked improvement during October, reaching a total which is a record for the year. This improvement is due to the renewed demand felt in foreign trade resulting in the shipment of more miscellaneous cargoes as well as the renewed movement of grain and sugar. The improvement in the foreign demand for cotton and coal does not reflect itself in the New York traffic figures. Steamship men are of the impression that ocean shipping has at last "turned the corner" of the depression, although there have been further recessions in rates within the past month in certain commodities.

Traffic through the port of Philadelphia in October was the largest since last spring. Foreign ships, however, took approximately three-fifths of the freight. They seem to be better able to obtain the export business than their American competitors.

New York

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
October, 1921...	413	1,662,564	428	1,644,729
September	385	1,304,544	417	1,556,645
August	478	1,583,991	390	1,300,897
July	394	1,456,304	403	1,423,109
June	408	1,368,334	419	1,425,649
May	425	1,454,033	366	1,328,643
April	410	1,453,056	438	1,509,353
March	455	1,574,526	448	1,539,885
February	424	1,407,133	374	1,315,556
January	455	1,437,725	414	1,433,564
December, 1920.	516	1,732,485	518	1,802,929
November	495	1,741,786	482	1,691,683
October	526	1,763,904	514	1,719,103

Philadelphia

(Including Chester, Wilmington and the whole Philadelphia port district)
(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
October, 1921..	86	239,103	67	204,652
September	60	143,434	66	195,558
August	84	208,961	61	144,029
July	75	178,925	61	148,674
June	71	176,968	74	214,524
May	110	295,617	70	178,464
April	105	255,249	79	209,854
March	102	306,512	87	242,606
February	104	285,369	75	221,402
January	84	250,233	68	217,281
December, 1920.	116	340,133	112	235,821
November	126	338,562	123	350,385
October	119	328,074	165	465,800

Norfolk and Newport News

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
October, 1921..	23	68,037	59	151,849
September	25	75,836	51	148,987
August	44	134,193	63	173,111
July	95	267,846	173	491,104
June	140	410,926	238	728,458
May	129	398,042	201	601,675
April	57	179,852	125	375,044
March	47	143,487	88	260,053
February	55	160,494	108	327,241
January	84	251,499	163	442,657
December, 1920	151	367,936	202	505,690
November	155	376,515	244	559,128
October	216	509,154	305	722,121

Portland, Me.

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
October, 1921..	13	21,191	8	13,652
September	10	15,345	12	26,224
August	13	17,192	13	14,265
July	13	15,195	11	9,597
June	15	15,723	12	12,749
May	4	8,324	10	8,885
April	17	54,804	19	64,310
March	24	75,529	25	80,107
February	20	66,422	21	73,581
January	34	93,933	28	86,559
December, 1920.	36	96,281	31	107,567
November	37	61,804	16	23,282
October	15	22,240	13	19,862

Boston

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
October, 1921..	99	229,800	67	158,695
September	88	197,208	69	144,268
August	100	280,687	63	102,032
July	98	178,403	81	115,503
June	138	211,667	100	119,945
May	122	190,148	87	98,008
April	101	217,080	71	133,952
March	99	306,454	49	113,184
February	74	260,502	46	119,847
January	72	175,052	50	125,904
December, 1920.	66	178,656	51	128,439
November	79	193,433	52	107,112
October	82	182,028	62	116,007

Mobile

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
October, 1921..	64	124,089	60	122,949
September	55	95,343	46	89,460
August	57	108,936	48	83,486
July	67	156,801	58	101,850
June	53	101,592	51	92,800
May	43	67,627	45	71,756
April	96	249,996	76	150,776
March	79	146,798	56	82,898
February	58	105,040	47	89,647
January	68	94,273	63	78,109
December, 1920.	97	147,575	74	122,293
November	73	91,814	54	74,252
October	64	98,107	81	128,540

New Orleans

(Exclusive of domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
October, 1921	177	431,976	176	425,186
September ...	191	510,646	226	628,057
August	210	478,941	194	482,451
July	157	371,379	176	410,749
June	172	440,527	195	479,495
May	166	410,047	145	354,539
April	205	515,287	210	530,283
March	201	458,079	202	452,385
February ...	178	436,045	200	453,899
January	168	399,903	183	443,303
Dec., 1920...	202	520,346	212	507,810
November ..	185	428,650	173	451,553
October	181	416,966	228	545,352

San Francisco

(Inclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
October, 1921..	445	780,840	454	87,144
September	459	807,276	440	749,911
August	464	770,980	457	788,238
July	275	699,092	335	676,340
June	194	474,948	211	543,629
May	271	594,409	164	426,255
April	377	607,559	452	703,717
March	335	645,435	341	611,575
February	305	594,636	297	548,103
January	356	585,689	330	566,201
December, 1920.	388	606,666	359	561,188
November	393	640,474	399	633,274
October	431	641,970	421	639,323

Key West

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
October, 1921..	55	66,400	59	67,608
September	62	77,229	70	101,948
August	65	69,911	59	66,223
July	85	89,901	86	87,449
June	105	104,326	104	101,494
May	100	104,326	104	103,571
April	115	117,586	111	114,748
March	112	107,736	108	107,083
February	124	118,950	120	119,241
January	128	146,679	127	142,474
December, 1920.	121	102,611	121	97,733
November	103	90,374	98	82,126
October	84	92,944	79	80,681

Baltimore

(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
October, 1921..	73	249,481	78	252,098
September	85	259,788	81	260,789
August	90	251,499	87	239,482
July	116	349,379	123	365,666
June	118	359,201	133	413,410
May	109	341,731	112	341,381
April	114	320,195	119	351,950
March	111	320,238	107	316,536
February	112	380,602	93	292,881
January	131	401,511	112	344,480
	—To foreign ports direct—			
December, 1920	92	264,142	113	329,320
November	109	316,743	145	425,493
October	134	372,463	188	545,974

Los Angeles

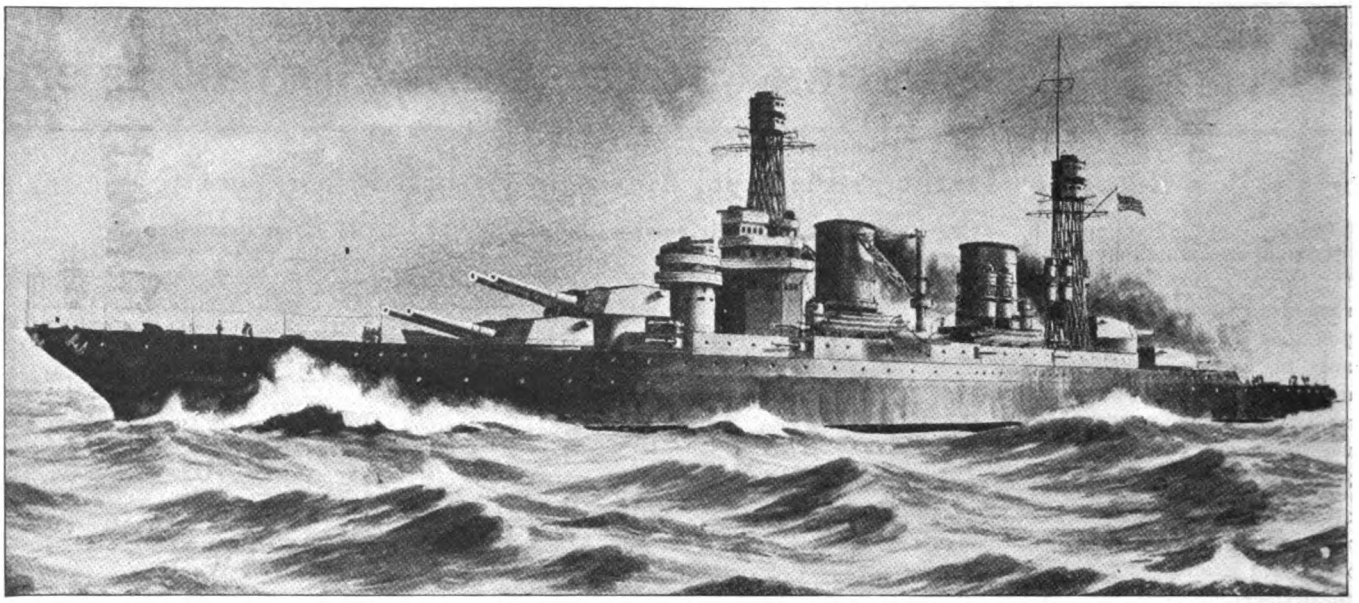
(Exclusive of Domestic)

Month	—Entrances— No. ships	Net tonnage	—Clearances— No. ships	Net tonnage
September, 1921..	54	128,611	45	119,275
August	50	117,775	40	106,243
July	45	144,913	34	101,581
June	27	100,411	31	100,580
May	35	98,885	26	77,036
April	32	119,049	28	71,958
March	39	99,455	33	94,380
February	74	97,252	60	93,544
January	60	111,882	86	64,844
December, 1920.	74	60,333	56	61,211
November	69	89,143	79	91,763
October	65	72,101	85	104,304
September	27	70,989	34	77,330

Seattle

Month	Deep sea arrivals No. ships	Net tonnage	Deep sea departures No. ships	Net tonnage
September 1921.	168	434,912	150	387,151
August	202	519,467	192	517,253
July	158	450,050	159	436,884
June	100	331,505	110	341,278
May	106	299,777	99	282,583
April	143	339,192	163	370,070
March	149	372,824	144	369,568
February	103	295,144	101	272,136
January	131	312,072	134	344,877
December, 1920.	205	323,744	186	302,051
November	256	348,452	228	337,890
October	359	347,412	314	366,669
September	422	380,582	323	345,535

Generated on 2024-08-27 23:54 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



U. S. S. RANGER, AMERICAN BATTLE CRUISER, NOW UNDER CONSTRUCTION

The above photograph of a drawing gives an excellent idea of the appearance of the United States battle cruiser RANGER, now under construction by the Newport News Shipbuilding & Dry Dock Co. This magnificent vessel will be 874 feet long, displace 43,500 tons, and will have a speed of 33 knots. Her immense engine power, 180,000 horsepower, will be greater than any vessel now in existence. She will be driven by the Westinghouse system of electric propulsion. Six battle cruisers of this type are now under construction. Their chief feature will be their high speed, but as they will carry eight 16-inch guns, their offensive power will be very high. They will also have good armor protection

Many Lines Opened from California

NEW service, ports of call and routes of travel between California ports and the United Kingdom, Continental Europe, South and Central America and the Orient, have just been established. Passenger traffic seems to be increasing generally. Reductions in the charter rates maintained by the shipping board would, in the opinion of most of the maritime interests in San Francisco, tend to increase freight traffic as well, and would transfer a large part of the present freight shipments into American bottoms.

One of the most important announcements of new services comes from the Compania Naviera de Estados Unidos de Mexico, through Coppel Bros., agents of the line in San Francisco. According to this announcement, a new passenger and freight steamship service will be inaugurated the latter part of November, between San Francisco and the west coast ports of Mexico and Central America. Six vessels are to be used in the new service, the SINALOA, CHIHUAHUA, CHIAPAS, OAXACA, COLIMA and GUERRERO, all flying the Mexican flag and all under mail carrying contracts with the Mexican government. They are sister ships and each is 270 feet in length, 1500 tons cargo capacity, with accommodations for 70 first-cabin passengers, 60 second cabin and 50 steerage.

Capt. James Irvine is vice president and general manager of the line and will maintain headquarters in Mexico City. Maj. H. S. Winter, secretary of the company, will be the Los Angeles agent for the line. Coppel Bros., 519 California street, are the San Francisco agents.

The Canadian Pacific Railway Co. has contracted for four new vessels, to be put into commission early next summer, according to William Webber, general agent of the Canadian Pacific in charge of ocean traffic who spent several days recently in San Francisco. The EMPRESS OF CANADA, 22,000 net tons, will be put on the Vancouver-Orient run.

The Luckenbach line has added three large freighters to its intercoastal fleet, giving it a total of 10 "express freighters" now operated out of San Francisco. These ships are the FLORENCE LUCKENBACH, 8340 deadweight tons; WALTER A. LUCKENBACH and F. J. LUCKENBACH, each of 11,555 deadweight tons. The Luckenbach line has increased its office space on the eighth floor of the Merchants' Exchange building, San Francisco, giving it the largest floor space of any steamship company offices in San Francisco.

The Osaka Shosen Kaisha has resumed direct freight service between Oriental ports and Havana, via San Francisco, according to announcement by McCormick & McPherson, San Francisco agents for the Japanese steamship company.

New steamship service between Copenhagen, Hamburg, Havana, Vera Cruz, Tampico, Galveston and New Orleans, has been established by the East Asiatic Co. These steamers will connect on schedule with steamers to and from San Francisco at New Orleans. The East Asiatic company will operate six 8000-ton vessels, all steamers. The remainder of the fleet, already operating direct between Pacific coast ports and Europe, are all motorships.

Ellerman's Wilson Line, Ltd., of London and Liverpool, announces it has mapped out a trade route connecting the Pacific coast of the United States with the United Kingdom and Continental Europe, service to begin with the sailing of the steamer CITY OF NAPLES, Nov. 30, from Continental Europe.

The Admiral line entered European service, via the Panama canal, with the clearance recently of the steamer ABERCOS, from Portland, Oreg., for the United Kingdom, the HANLEY from Seattle for the same destination and a third from San Francisco. The ABERCOS and HANLEY are the first government owned vessels to be turned over to a private operator for offshore service under the widely discussed "bareboat charter" provision recently promulgated by Chairman Lasker of the shipping board.

The Holland-American line has notified its San Francisco offices that it has established direct passenger and freight service between Rotterdam and New Orleans, connecting at the Louisiana port with passenger and freight steamers to and from San Francisco and other Pacific coast ports. Three 9000-ton registered steamers will be operated on this run, the MAASDAM, LEERDAM and EDAM.

The Williams line has made Norfolk, Va., a port of call.

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Activities in the Marine Field

Latest News from Ships and Shipyards

Freight Demand Light as Season Ends

BY MYERS L. FEISER

WITH a large number of freighters already laid up for the winter and still with more vessel tonnage offered than in demand, November, usually a slack month, will go down in the history of lake shipping as one of the dullest periods ever recorded. Coming at the close of one of the poorest seasons yet experienced, the month seemed to fit in as the proper ending for the 1921 lake business.

Added to the general trend of the traffic, a severe storm hit the Great Lakes with the opening of November and delayed practically all shipping for 24 hours. This, however, did not cause any amount of inconvenience other than the anxiety which naturally accompanies such storms. Its effect upon shipping was evidenced by a few vessels driven ashore.

Only a few ore cargoes were offered, comparatively speaking, as the season's end drew near and again shipments were not in number enough to occupy the tonnage offered. Coal shipments were perhaps the most active, although they too dwindled and indicated the proximity of the close of the season.

* * *

Purchase of nine French freighters, built in the United States and used in war service, has been made by the Mathews Steamship Co., Toronto. This puts the Mathews fleet at 19 steamers, all of which are to be used on the Great Lakes. The boats just purchased cost the Mathews company approximately $2,500,000. They are full canal-size ships and are to be renamed.

* * *

The steamer NIAGARA, which went aground in the Welland canal, was docked at Ashtabula for repairs.

* * *

Striking at Seneca shoal, the steamer L. R. DAVIDSON was leaking when she reached Buffalo recently and had to lighter part of her cargo of coal before docking.

* * *

Following the storm early in November, the water level at the lower end of Lake Erie became so low a number of groundings were reported. The steamer THOMAS MAYTHAM went on the bottom at Port Colborne and required two tugs to be released.

* * *

Barge 104 was damaged when struck by the steamer ROBERT RHODES which hit gate No. 3 in Welland canal recently.

* * *

O. W. Blodgett, Bay City, Mich., recently bought the barge MINGOE from the Pringle Barge Line Co., Sandusky. She will be used in the lumber trade. Her first trip under her new owner was from Marine City with salt to Superior where she loaded lumber for Bay City.

* * *

Damage to her rudder stock and stern quadrant was sustained by the steamer W. H. WOLF when she backed into a dock at Fort William recently. Temporary repairs were made at Port Arthur.

* * *

Effective Nov. 1, the superintending engineer notified operators no vessel drawing more than 14 feet of water would be allowed to enter and pass through the Welland canal.

* * *

Loaded with ore and bound for Indiana Harbor, the steamer JOSEPH BLOCK went ashore at Mission point near Mackinac island recently. She was lightered, released and reloaded.

* * *

Traffic in the Welland canal was blocked recently when the steamer BRANTFORD, ex-SAMUEL MARSHALL, went ashore at Thorold.

* * *

Navigators have been warned of a new electric submarine cable transmitting power to the fog signal at Buffalo light station. The cable has been laid in a straight line between the light station and a point 100 feet south of the South Pier light, passing about 20 feet south of the Buffalo light station foundation.

* * *

In 35 working hours, the steamer ANNA C. MINCH was repaired at the plant of the Toledo Shipbuilding Co. after going ashore at Bois Blanc island. She had 15 damaged frames and nine bottom plates taken off.

* * *

Springing a leak and with three feet of water in her hold, the barge C. E. REDFERN, with a cargo of coal, Cleveland for Wallaceburg, recently put in at Kelley's Island for temporary repairs. Part of the cargo was lightered.

* * *

The east range, north channel front light at St. Louis bay, destroyed by a steamer, has been replaced.

* * *

Effective Nov. 15, P. C. Sprague, general freight agent of the southwestern division of the Pennsylvania lines, became traffic manager for M. A. Hanna & Co., succeeding the late O. E. Anthony.

* * *

Capt. P. L. Millen, one of the pioneer masters of the Great Lakes, died at Toronto, Can., Nov. 5. He sailed vessels of the Hanna fleet retiring in 1920 from the command of the steamer D. J. MORRELL of that line. He joined the Hanna fleet in 1904. His home was in Romeo, Mich., where he was buried Nov. 9.

* * *

BAYTON is the new name of the steamer FRANCIS WIDLAR which was purchased from W. D. Becker, Cleveland, by A. E. Mathews, Toronto. The vessel was wrecked on Pancake Shoals in Lake Superior in November, 1920. She is being repaired at Port Arthur and when completed will be operated in the grain trade under command of Capt. W. J. Kirkwood, formerly of the YORKTOWN of the Mathews fleet.

* * *

In avoiding the sunken barge THOMAS QUAYLE in the outer harbor at Toledo, the steamer GLENLIVET, loaded with grain, went on a sand bar but later was released with little damage.

* * *

Capt. John Nahrstedt, who had been with the Pittsburgh Steamship Co. since it was organized, died recently at his home in Lakewood, O. He was 60 years old. The last vessel he commanded was the steamer ALVA C. DINKEY. He had been ill for some time and did not sail in the 1921 season.

* * *

The United States lake survey reports the monthly mean stages of the Great Lakes for October, in comparison with September, as follows:

	Feet above mean sea level	
	September	October
Superior	602.67	602.53
Michigan-Huron	580.04	579.86
St. Clair	574.99	574.65
Erie	572.17	571.79
Ontario	245.43	245.11

Lake Superior is 0.14 foot lower than last month, 0.15 foot lower than a year ago and 0.16 foot below the average stage of October of the last 10 years. Lakes Michigan-Huron are 0.18 foot lower than last month, 0.69 foot lower than a year ago and 0.65 foot below the average stage of October of the last 10 years. Lake Erie is 0.38 foot lower than last month, 0.26 foot lower than a year ago and 0.38 foot below the average stage of October of the last 10 years. Lake Ontario is 0.32 foot lower than last month, 0.18 foot lower than a year ago and 0.71 foot below the average stage of October of the last 10 years.

* * *

A fixed red lens lantern light of 160 candlepower marks the wreck of the barge RICHARD BURNS which

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

sank in midchannel approximately three miles below the St. Clair flats canal lower light.

* * *

The steamer CALCITE and the car-ferry steamer ASHTABULA each recently lost an anchor in Ashtabula harbor.

* * *

The CANOPLE, formerly the IRON KING, built in 1887, settled on the bottom at Erie recently and is regarded as practically a total loss.

* * *

Free schools in navigation and marine engineering will be conducted at Cleveland and Marine City during the coming winter by the Lake Carriers' association, according to an announcement by the educational committee of the association. The school has been an annual affair since 1916 by which 229 oilers have obtained original licenses as marine engineers and 153 wheelsmen and boatswains have received pilot's licenses.

Along the Atlantic and Gulf Coasts

BOSTON, Portland, Me., and New London, Conn., have been selected by the shipping board as three of the 14 definite mooring sites for its steamers not in service. Of 1464 ships under its control, only 420 are in service at present.

* * *

Recently the 4-mast schooner ISABEL C. HARRIS was purchased by Capt. O. A. Gilbert, Boston, who, it is understood, will put her in the coastwise trade. She is 998 gross tons and was built at Wilmington, N. C., in 1918 at a cost of $225,000.

* * *

Plans have been perfected for a steamship service from Santos, Brazil, to Boston, by C. H. Sprague & Son, Boston.

* * *

Contract for converting the Furness-Bermuda Line steamship FORT GEORGE. from a coal to an oil burner, has been awarded the Fore River plant of the Bethlehem Shipbuilding Corp., Quincy, Mass., the bid being $44,000.

* * *

What is said to be the smallest floating drydock in the world has been added recently to Boston's ship repair facilities, with the launching of the dock at the yards of the Bertelsen & Petersen Engineering Co., East Boston. It is 120 feet long, 45 feet wide and capable of lifting 500 tons. The dock will be used in handling small schooners, trawlers, tugs, etc.

* * *

The Charter Oak Steamship Co., New London, Conn., has been incorporated to operate two steel steamships between Norwich, New London and New York. A. Brewster Clark, is secretary.

* * *

A new service from Boston to Halifax and St. Johns has been inaugurated, with the sailing of the steamer BOURNHOLME, 1450 tons. Frank H. Chipman, who was manager at Boston for the Nova Scotia Steamships, Ltd., has been secured by the new company as Boston manager.

* * *

Detailed statistics of the department of commerce show that the port of Boston ranks fifth in quantity of imports and fourteenth in amount of exports for the year ended June 30, 1921. Boston was outranked by New York, New Orleans, Philadelphia and Baltimore in imports. The showing in tons made by the first nine ports in total foreign trade is as follows:—New York 21,140,122; New Orleans, 9,083,851; Baltimore, 8,866,212; Norfolk, 8,024,271; Philadelphia, 7,606,345; Galveston 5,759,446; Newport News, 4,484,089; Port Arthur 3,775,333 and Boston 3,061,071.

* * *

Crowell & Thurlow, Boston, announce another line of steamers from Boston to Pacific coast ports. According to plans, the initial sailing from Boston will be made by the steamer FELIX TAUSSIG.

* * *

Submarine S-13, last of this type of undersea warships, was launched recently at the Portsmouth navy yard, Portsmouth, N. H. Miss Mary Howe, Washington, was sponsor at the launching. Following the launching, the keels of two of the V-type, which will be the largest submarines ever attempted by the United States navy were laid. They will be 335 feet long, a hundred feet longer than any other submarines of the American navy.

* * *

Frank J. Orfilia, general southern agent for the Campagnie Generale Transatlantique—the French line—announced the establishment of direct sailings from New Orleans to German ports, via, Havre, France, beginning about the middle of October.

* * *

Announcement is made by the J. H. W. Steele Co., New Orleans, that two new steamship lines would soon be maintained out of New Orleans. The East Asiatic Co., Copenhagen, Denmark, will inaugurate service between New Orleans and Danzig, with stops at Havana, Progreso, Vera Cruz, Tampico and Hamburg. The Societe des Afreteurs Reunis of France will start service between New Orleans and French, Spanish and Italian ports on the Mediterranean.

* * *

A new steamship service from New Orleans to Hamburg and Bremen has been announced by Robert Tuemler of the Southern Shipping & Trading Co., Inc. The American steamship ORLEANS, the first steamer, will sail around Nov. 25. The vessel is of about 10,000-ton capacity and will be followed by the ORINOCO and ORIENT of about 7450 tons each. The service will be a regular one. The three vessels are owned by the Oriental Navigation Co., New York.

* * *

Resumption has been made by the Cia de Navegacao Lloyd Brasileiro of service between New Orleans and Brazil and Argentine. The steamship TOCENTINS brought a full cargo of coffee to New Orleans during the first part of October and the steamship MACUCU followed later in the month.

* * *

Free storage of coal at the New Orleans dock board's new coal tipple from Oct. 21 to Dec. 1 was authorized by the board in order to acquaint the trade with the advantages and to encourage the use of the coal tipple and storage yard. On and after Dec. 1, a tipple tariff of 25 cents per ton for handling coal from cars to ship and one-half cent per day per ton for storage when coal is not delivered immediately to ship will be put into effect.

* * *

Late in October, officials of the J. H. W. Steele Co., New Orleans, announced an addition of six large cargo boats would soon be made to the fleet now operating from New Orleans to the Pacific coast. The new vessels are all modern ships ranging from 5100 to 8200 tons deadweight. They will operate under the name of the Pacific-Caribbean-Gulf Line with the Steele firm as the gulf agents. The steamships will be the RED HOOK, 7800 tons; OSAGE, 7800 tons; DELCO, 5100 tons; HONOLULU, 8200 tons; HOBOKEN, 7800 tons, and NYANZA, 8200 tons. They are all privately owned and fly the American flag.

* * *

With the sailing of the MAASDAM from New Orleans late in October, passenger service was resumed by the Holland-American line to Rotterdam and other Netherlands ports on a scale even greater than before the war. The MAASDAM, built exclusively for carrying third-class passengers, has accommodations for 924 third-class and 88 "preferred" third-class passengers.

* * *

Members of the New Orleans dock board propose to make a study of the real estate values, costs of construction, rentals and methods of possible development and practical use of the industrial canal preliminary to adopting a definite policy for the so-called inner-harbor which should be ready for use within a few months.

* * *

Approximately $50,000 worth of contracts for new work were awarded by the New Orleans dock board recently. The bid of the Hattiesburg Creosoting Co. for 430,000 feet of creosoted lumber, $20,815.44, and that of the Colonial Creosoting Co. for $34,174.50, for creosoted piling were approved. Con-

Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

tract for fire and plumbing connections at the new Desire street banana wharf was awarded to J. A. Reynolds, Inc., for $3,377.10.

* * *

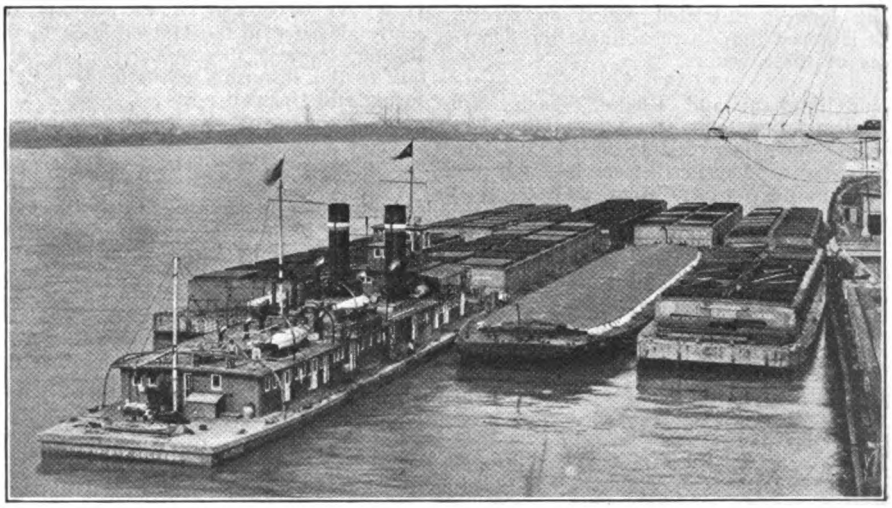
The steamship tanker TOMIAHUA built for the Southern Pacific line arrived on her maiden voyage at New Orleans late in October. She will be placed in the New Orleans-Tampico oil service.

* * *

The GARIBALDI, consigned to the New Orleans-Havana Steamship Co., arrived at New Orleans during the latter part of October inaugurating a new 12-day service between New Orleans and Cuban ports. This company was recently organized by John A. Donald and J. A. Castellanos with offices at 403 Queen and Crescent building, New Orleans.

* * *

The Southern railroad is preparing for the immediate reconstruction of its Port Chalmette coal tipple which was destroyed by fire about a year ago. The new structure will cost approximately $1,000,000.



BARGE LINE REACHES NEW ORLEANS WITH RECORD BREAKING CARGO

A record breaking cargo on the Mississippi-Warrior Barge line was delivered when the towboat CAIRO reached New Orleans with eight modern barges in tow, loaded with 12,000 tons of cotton, grain, steel girders and general merchandise. The cargo, sufficient to fill two steamships, arrived under command of Capt. J. W. Harris. After delivering its freight, the towboat left two days later with six other barges in tow loaded with merchandise destined for upstream points on the Mississippi river.

Activities Along the Pacific Coast

SAN FRANCISCO and Portland shipping interests are asking the shipping board to allocate additional passenger liners at the expense of the service out of Seattle. The matter will be given a hearing at Washington Nov. 14. When five of the 535's were assigned to the Pacific Steamship Co. for operation from Puget sound, it was presumed there that the question of passenger service had been settled. However, with the curtailment of shipping board tonnage from the Columbia river, Portland is now asking that passenger vessels be placed in service from the latter port. At present Portland has only one Japanese passenger line to the Orient.

* * *

Inaugurating the new service of the Compagnie Generale Transatlantique, the French steamer HONDURAS was on berth at north Pacific ports early in November. This service will be monthly and will operate to French, Belgian and German ports.

* * *

Shipping board announcement states that the monthly steamship service from the north Pacific to Australian ports will be continued indefinitely. Owing to Canadian competition and the depressed state of business in the Antipodes, this line has had difficulty in obtaining cargo but it is believed that regular service will develop paying business in time.

* * *

Another steamship service from the north Pacific to British and north European ports has been established by the Ellerman Wilson Line, Ltd., for which Norton, Lilly & Co. are Pacific agents. Monthly sailings will be offered, beginning in November.

* * *

The Elder Steel Steamship Co., New York, has invaded the intercoastal route with a fleet of 11,500-ton steel carriers. This line will furnish regular refrigerated service which, it is expected, will appeal to the shippers of apples and other perishables from north Pacific terminals. This service will be inaugurated in November by the steamer DEERFIELD.

* * *

The British steamer NORTHUMBERLAND which recently carried more than 175,000 boxes of apples from Seattle and Portland is one of the largest freighters ever to visit the Columbia river. The NORTHUMBERLAND registers 7834 tons net but the Columbia river record is held by the British steamer ORCA, 9449 net tons, which loaded wheat at Portland last year and put to sea drawing 35 feet.

* * *

Imports from the Orient during September, as shown by Seattle port figures, totaled $13,123,584 as compared with $12,992,922 in September, 1920.

* * *

Trouble is brewing among the various passenger lines engaged in transpacific routes, because the Nippon Yusen Kaisha recently reduced passenger fares. This company takes the position that it is entitled to a differential because its competitors are operating faster vessels. The other lines have asked for a reconsideration and the matter is still under discussion.

* * *

For the three months ended Sept. 30, wheat and flour shipments from Puget sound and the Columbia river show a gain of 54 per cent as compared with the same period in 1920. The movement of cereals to the Orient this year registers a 100 per cent increase over 1920.

* * *

Grain and flour exporters of the north Pacific have issued an ultimatum to steamship carriers that engagements of sacked grain or flour are hereafter to be on the basis of delivery being accepted from the pile in warehouse instead of at ship sling. The difference in cost is about 25 cents per ton. Shippers are anxious to return to the practice prevailing prior to the war. The shipping board is opposed to the old custom but foreign steamships are willing to absorb the difference.

* * *

During the third quarter of 1921, canned salmon shipped from Seattle totaled $1,929,685 as compared with $822,367 in the second quarter.

* * *

The Columbia-Pacific Shipping Co., operating the only Oriental line of shipping board vessels from the Columbia river, has obtained permission to extend its service to South China and Manila.

* * *

The port of Tacoma's new terminals are handling an increasing volume of offshore cargo. Figures covering the period from March 25 to Sept. 30 show that 14,358,592 feet of lumber and 681,636 feet of logs passed over this dock.

* * *

Increasing demand for China clay, used principally in the manufacture of paper, has resulted in arrangements for bringing full cargoes from England to Seattle. Regular service will be established and the first cargo is expected in December.

* * *

Construction of a fireboat for the protection of Tacoma's waterfront has been indefinitely postponed owing to lack of funds.

* * *

Commercial salmon fishing, under a new law, is now prohibited in Puget sound waters until May 1, 1922. This is

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

the longest restricted period on record. It is hoped thus to rehabilitate the fisheries of these waters.

* * *

Bellingham and Blaine, Wash., are contemplating extensive port improvements, including reclamation of tidelands, erection of additional terminals and the co-ordination of railroad and terminal facilities.

* * *

Tentative plans have been prepared for constructing at San Francisco three large passenger steamships for the San Francisco & Portland Steamship Co. Each vessel, it is stated, will cost $1,750,000. They are to be thoroughly modern, with a speed of 17 knots and accommodations for 275 first class and 100 steerage passengers. They will be 367 feet in length, of 5500 tons deadweight and equipped with Scotch boilers, and quadruple expansion reciprocating engines with single screw.

* * *

According to a federal court decision, liability of the Canadian Pacific, may not be limited as to the claims of passengers, their dependents or baggage. This applies to the wreck of the company's Alaska liner PRINCESS SOPHIA on Vanderbilt reef, Alaska, Oct. 25, 1918. There were 349 victims and claims totaling $2,500,000 are already on file. The company sought to limit its liability to $8000 representing the passenger and freight income of the voyage.

* * *

John W. Allen, of the Dominion fisheries department, has perfected a wireless equipment for attachment, in the event of accident, to the regular radio apparatus of steamers. This invention is designed to furnish power for wireless independent of the engine room dynamo. It has attracted much attention and is shortly to be tried on a Canadian government vessel.

* * *

The suspension of Capt. William Bradley, whose license was revoked for six months following the loss on Willapa bar of the Canadian steamship CANADIAN EXPORTER, has been quashed by the British Columbia supreme court. Captain Bradley's license as master was restored.

* * *

Steaming from San Francisco to Seattle in passenger time, 65 hours, the American-Hawaiian freighter OHIOAN reached the latter port in 29 days and 18 hours including several stops, from New York. This is one of the smartest passages recorded in the intercoastal service.

* * *

Arriving from Japanese ports, the ALABAMA MARU recently landed at Seattle 3923 bales and 214 cases of raw silk and silk goods valued at $4,214,000. While general cargo in quantity is not coming from the Orient, the revival of the silk trade is regarded as an indication of improving conditions in the Far East.

* * *

The Canadian Government Merchant Marine has raised the wages of officers and crews engaged on coastwise vessels about 15 per cent to meet the scale paid by American ships in this trade.

* * *

Realizing the growing importance of transpacific business, the Matson Navigation Co. has asked the shipping board for permission to transfer two of its liners, HAWKEYE STATE and BUCKEYE STATE, recently allocated to the Matson lines, to the Pacific service, thereby adding a new link to the steamship chain binding California and Oriental ports.

* * *

The Pacific Mail Steamship Co. is preparing to open independent offices at San Pedro, Cal. Officials of this company announce that after Nov. 1, the hour of departure of all its vessels from San Francisco will be 1 p. m., instead of 3 p. m., as previously.

* * *

The Pacific Steamship Co.'s steamer, ADMIRAL GOODRICH, inaugurated a new coastwise service for that company at the end of October, when she cleared from San Francisco for Seattle, Vancouver, Bellingham and Everett. The CURACAO, one of the company's fleet of steamers, will be taken from the Coos bay run, to maintain a regular schedule of sailings between San Francisco and Puget sound ports, clearing from San Francisco every other Saturday.

* * *

Announcement is made by H. K. Frye, traffic manager, that the Western Pacific railroad has reduced the rate on bunker coal from Utah mines to San Francisco to $6 per ton. The present rate is $7.25. Competition with bunker coal from Manchuria and Wellington, which has been arriving freely in San Francisco, is said to be responsible for the reduction in rates.

* * *

The Union line announces that the motorship HAURAKI will be placed in the Vancouver-Sydney service of that line, in January. The new motor vessel is of 10,650 tons and will have a freight capacity of 12,000 tons.

* * *

Two motorships now being built for the United American lines for Pacific coast service are to be delivered in January, according to announcement by Williams, Dimond & Co., San Francisco agents for the United American.

* * *

Inland waterway navigation and transportation is to be considerably improved by the removal of two hairpin bends from the Sacramento river, along the west boundary of Sutter basin, by federal engineers. Work has been commenced on the project which will cut down steaming time on the Sacramento, and have the effect of changing some 200 acres of land from Colusa county into Sutter county.

* * *

Though northbound cargo for state of Washington ports is reported to be good, southbound cargo is so poor that the Pacific-Argentine-Brazil line is considering the abandonment of its service to Seattle, according to a statement by A. M. Gillespie & Co., Seattle agents for the line, to the chamber of commerce of Seattle. The company states that, while Seattle merchants agreed to furnish southbound cargoes for the ships of the line, they have failed to do so.

* * *

The total tonnage of the 27 sailing vessels of the Alaska salmon fleet which arrived in San Francisco this season was 33,882, according to the marine department of the San Francisco chamber of commerce. Only four steamers, with a total tonnage of 2980, came down from the north this year.

* * *

The power-schooner LOTUS, formerly the army tug CARTWRIGHT, was burned at sea late in September off the coast of Point Hueneme, California. The LOTUS, a vessel of 76 tons, was a total loss, but the crew of 12 men, Capt. J. C. Christensen was saved by the White Flyer steamer HUMBOLDT. The unfortunate schooner was owned by Captain Christensen and O. H. Baldwin, San Francisco. Cause of the fire is unknown.

* * *

The United States shipping board has assigned the new motorship, WILLIAM PENN to the Barber Steamship line, and she will be operated in the New York-China ports run, via San Francisco and Honolulu. The PENN is a new 12,000-ton motorship, the first one built for the shipping board.

* * *

The Standard Oil Co. of California put its new motor tanker, H. T. HARPER, into commission on San Francisco bay late in October. She was built by the Moore Shipbuilding Co., Oakland, Cal., and has a capacity of 60,000 barrels of oil, just twice that of the CHARLIE WATSON, the first motor tanker built.

* * *

The Moore Shipbuilding Co., Oakland, Cal., has completed its $8850 contract for repairs to the low-pressure cylinder on the shipping board steamer ORIENTAL, and is at work on repairs to the Pacific Mail steamer GOLDEN GATE, which was damaged by collision on the Inland sea of Japan.

* * *

Increasing demand for fuel and other oils in the Orient is bringing all the Standard Oil tankers, which have been laid up around San Francisco bay, back into service. The ROYAL ARROW, last to leave, cleared at the end of October with a full cargo of kerosene.

* * *

Pacific coast shipowners and operators are urging the immediate passage of the bill now before congress to increase the quota of immigrants from Australia from 247 to 1200 a year.

* * *

Another Japanese steamship line has entered the San Francisco-Australia service. It is the Yamashita Kisen Kaisha, of which Frank H. Hitching is California agent. The steamer YESHIME MARU, 6700 tons, inaugurated the service, as she cleared Nov. 5. The YEIKOKO MARU will arrive Nov. 20. Mr. Hitching announced that, in addition to 20 steamers owned by this company, it controls 200,000 tons of bottoms.

* * *

Fred M. Kramer, formerly a cadet in the service of the Pacific Mail Steamship Co., was given his master's papers late in October. He is the first cadet on the Pacific coast ever to receive a navigator's license. He went out as first officer on the steamer VENEZUELA when she cleared from San Francisco for Baltimore, Oct. 29.

* * *

Work of salvaging the cargo and gear from the wreck of the steamer CANADIAN EXPORTER has been accomplished successfully. The steamer broke in half on the bar in Willipa harbor, after running aground during a dense fog. The after part of the ship could not be salvaged, but the forward half was stripped of cargo and all equipment. Next spring, the wreckers hope to float the forward part of the ship and save it.

* * *

The General Steamship Corp. will turn back the steamer WALLINGFORD to the shipping board as too small for the service

Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

required, according to Drew Chidester, manager of the corporation, at San Francisco.

* * *

The Toyo Kisen Kaisha has added another steamer, the GINYO MARU, to its Oriental-San Francisco-South American service.

* * *

Shipping circles in San Francisco are much interested in the official reports that Mexico is to have a government-owned merchant marine operating on the Pacific side of the continent, such as the government-owned and operated Compania Naviera Mexicana operates between Mexican ports of the gulf and New Orleans. According to a statement by Gen. Salvador Alvarado, Mexican minister of finance, 50,000,000 pesos has been appropriated by the government with which to buy ships and inaugurate the service north and south on the Pacific coast of both Americas.

* * *

The Congress Lines, Ltd., will make its appearance in intercoastal traffic soon, according to announcement by Frank H. Hitching, who has been appointed Pacific coast agent. He said the first ship, the PRINCESS, formerly the J. L. LUCKENBACH, will arrive in San Francisco from New York late in November, inaugurating the service between Pacific coast and Atlantic coast ports. The new Congress line has just been incorporated, and according to Mr. Hitching's announcement, has nothing to do with the defunct Congress line, which once operated shipping board tonnage. All of the ships to be operated by the new company are either privately owned or chartered, according to Mr. Hitchings.The company will maintain a sailing every 25 days.

* * *

More extended radio fog signal service on the Pacific coast, and a greater number of stations, is planned by the United States lighthouse service according to announcement in San Francisco. The work will be done as rapidly as funds can be made available. A radio fog-warning apparatus will be installed at once on the lighthouse tender SEQUOIA, and also on San Francisco lightship No. 70. These will be the first of their kind installed on the Pacific coast. Numerous wrecks on the California coast due to heavy fog are the cause of this action.

* * *

Weekly freight service between San Francisco and British Columbia ports has been established by the Pan-American line, through the Kingsley Navigation Co., Vancouver, B. C., which has agreed to place two of its vessels in service, according to A. G. Laurent, general manager of the San Francisco office of the line. The service is to be extended later to Los Angeles.

* * *

The third of the vessels built for the United States shipping board in Shanghai, the steel, 10,000 deadweight ton freighter ORIENTAL, made the trip across to San Francisco in 21 days, in ballast, to the Robert Dollar Steamship Co. The fourth and last vessel built in China for the shipping board, the steamer CATHAY, is expected before the end of November.

* * *

Announcement is made that the California Fruit Growers' exchange will establish a new steamship line between ports of the Pacific coast and those of the Atlantic coast, next year, to be known as the Producers' Steamship Co. Vessels used will be shipping board steamers of 7500 tons each, and the object is to reduce rates on California fruits shipped eastward.

* * *

Establishing a record for freighter time between New York and San Francisco, the Luckenbach Steamship Co.'s steamer EDWARD LUCKENBACH, made the run in 15 days and 11 hours, her elapsed time being 18 days, due to a stop at Los Angeles, to discharge and take on cargo.

* * *

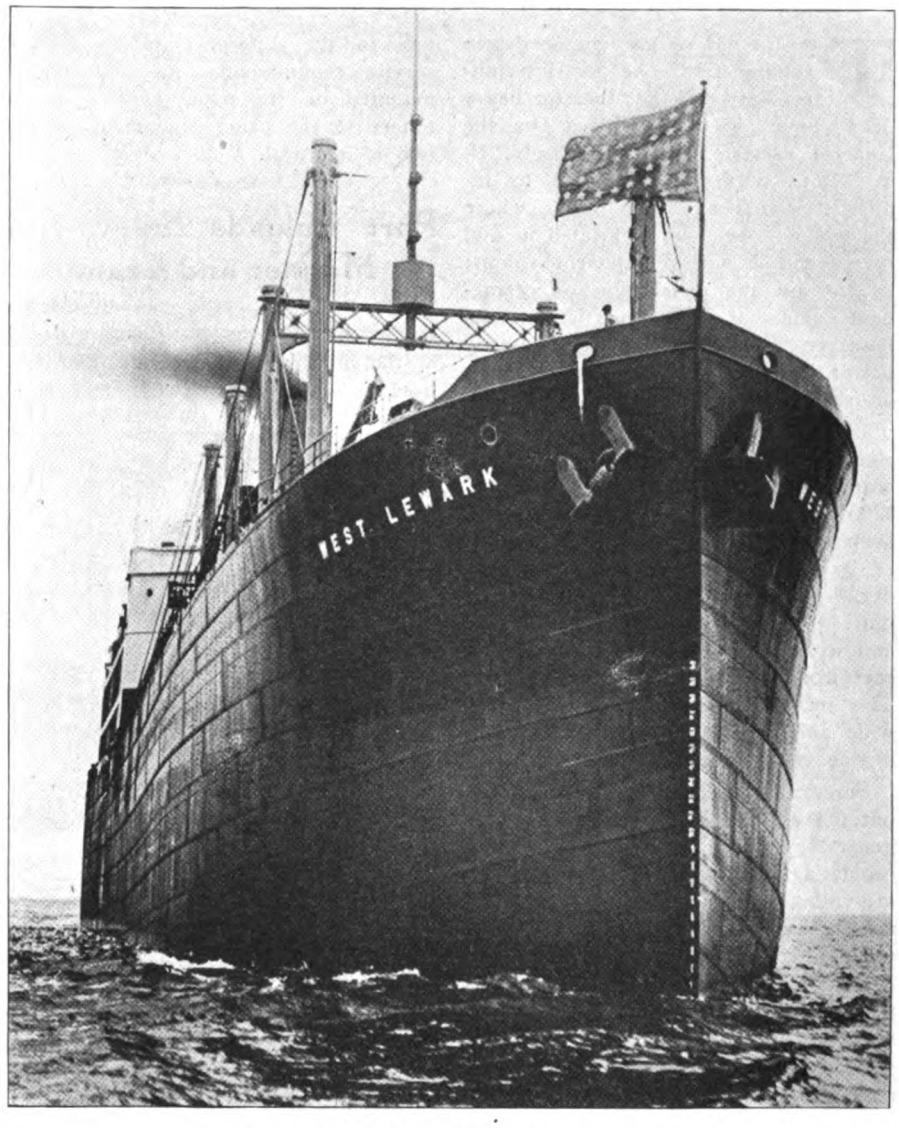
The Pacific Association of Port Authorities will hold its 1922 convention in Oakland, Cal., according to decision reached at Vancouver, B. C., where the 1921 convention was held recently. A. E. Carter, commissioner of public works, Oakland, was elected president of the association, at Vancouver, and C. P. Howard, chairman of the harbor development committee of the Oakland chamber of commerce, was named secretary.

* * *

Liners of the 535-foot type, allocated to the Pacific coast will not be permitted to carry passengers or freight hereafter, on their maiden voyages from the east to the west coast. The shipping board has banned this traffic as detrimental to established lines operating through the Panama canal.

* * *

The Atlantic, Gulf & Pacific Steamship line will increase its fleet by four vessels, according to announcement by W. B. Duke, president of the company, in San Francisco, late in October. C. A. Askew, vice president of the company, has gone to San Francisco from Baltimore, to replace H. M. Wade as Pacific coast manager, Mr. Wade having been transferred temporarily to the Baltimore office.



BIG PACIFIC-BUILT AMERICAN FREIGHTER

This 11,500-ton flush deck freighter was built and engined by the Los Angeles Shipbuilding & Dry Dock Co. under contract with the shipping board. She is 455 feet 9 inches over all, the type being engined by the same 3500 indicated horsepower marine engine designed and built in the shops of this company for 27 out of a total of 35 cargo carriers, contracted with the shipping board. The first 30 of these ships, 22 of which have the same type of engine as the above, were of 8800 tons. Their overall length was 423 feet 5 inches. Considerable interest was shown in the speed to be developed by the changed model with increased length in a ship designed to carry nearly 3000 additional tons and with exceptionally efficient cargo storage and handling arrangements. Without cargo, of course, and with her propeller partially out of water so that it was impossible to turn up her full power, the WEST LEWARK showed a speed of 14.6 knots on certain laps of the measured course and gave an average of 13.3 knots for the trial run. Compared with the average performance of the smaller type of ship, the larger model shows an increase of substantially one knot for trial trips and should maintain this advantage of one knot when loaded, giving an average loaded speed of around 11.6 knots as compared with the average of 10.6 of the smaller type of vessel

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Practical Ideas for the Engineer

Welding Outfits Use Gas Engine Power— Unload with Magnet — Adjustable Prow

TWO types of gas engine driven welding sets, one for intermittent duty and the other for heavy duty have been developed by the General Electric Co., Schenectady, N. Y. Both outfits are adapted to industrial plants and ship yards where the work to be done is located in odd places and is not of sufficient volume to warrant the installation of permanent equipment. Their particular field, however, is in places where electric power is not available or inconvenient or costly.

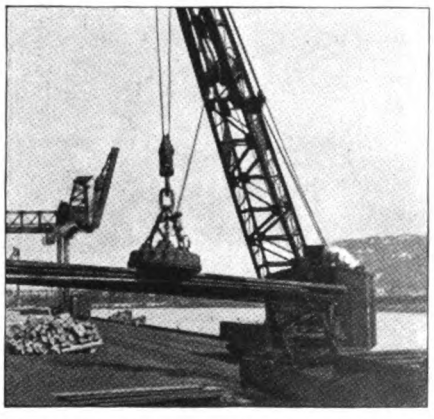
The medium duty equipment, designed for intermittent duty, has a generating unit consisting of a 4 kilowatt 1200 revolution per minute, 60-20 volt, 200-ampere generator directly connected by a flexible coupling to a 4-cylinder, 4-cycle, 20-horsepower gasoline engine. The engine, radiator, generator and welding panel are assembled on a cast iron base and mounted on skids. The set is 86 inches long, 28 inches wide and weighs about one ton. The engine is of the overhead valve type.

Practically constant energy throughout the working range is given by the generator which is self exciting and regulating. It gives a no load or striking-voltage of 60 volts, which decreases automatically to the proper welding voltage, 18 to 20 volts, when the arc is struck. Driven at 1200 revolutions per minute it delivers a working current of 200 amperes and an output of 4 kilowatts. The panel carries the generator field rheostat and series field dial switch by which the current can be adjusted from 75 to 200 amperes in 25-ampere steps. A reactor choke coil mounted on the set and connected in the welding circuit protects the generator from current surges.

Either one or two welding circuits can be supplied with energy by the heavy duty equipment which consists of a 20-horsepower, 2-cylinder; opposed gas engine, a 4-kilowatt generator and a welding panel mounted on a structural steel base. The one operator type weighs 2400 pounds and the two operator type 3200 pounds. The engine is designed for continuous operation at rated output. Kerosene, distillate, gasoline, or natural or artificial gas may be used as fuel. A silent chain running in oil drives the generator at a speed of 1750 revolutions per minute. The windings differ somewhat from the medium duty generator windings due to the difference in speed and service requirements. An ammeter is mounted on the panel of this outfit; otherwise the panel equipment of the two is identical.

Port Unloads Steel with Magnet and Crane

The port of Seattle has an electric magnet of 16 tons maximum capacity at the Smith's Cove terminal pier "A" used in the handling of steel rails,



SEATTLE USES ELECTRIC MAGNET AND CRANE TO UNLOAD STEEL

scrap iron, steel ingots, pig iron and sheet metal. These commodities are unloaded from the car upon arrival, stored on the wharf and also loaded into the ship when exported, or more frequently direct from car to ship. The electric magnet can be operated in connection with either the locomotive or gantry crane. Some of the results obtained by use of this magnet has been the unloading of a car of steel plates in one hour with the use of the locomotive crane and one operator, while formerly, with the sling method, it required three additional men in the car and took six hours.

Radio Compass Bearings

A new publication by the United States coast and geodetic survey of special interest to mariners is ready for distribution. It is Special Publication No. 75, entitled *Radio-Compass Bearings,* by Oscar S. Adams. In it are given simple instructions for two different methods of plotting a ship's position at sea by means of radio-compass bearings. The first method is for the Mercator chart and requires the use of three graphic charts which may be obtained at 20 cents each from the director, United States coast and geodetic survey, or from any of the field stations or sales agencies of that bureau. The second method given is for use with a gnomonic chart. Tables are included which give the gnomonic azimuths or the azimuths to be plotted on the gnomonic chart, at 10 different radio-compass stations along the Atlantic coast. These tables are bassed on the United States hydrographic office chart No. 1280 and, of course, can not be used for any other chart.

Japanese Loadline Law

The following text of the Japanese load line law for ships, which was passed on March 8, and will be applicable to Japanese ships and ships of other nations at a date to be fixed by order later, is given by the department of commerce.

Article 1. All Japanese vessels shall have their loadline assigned and marked under this law, except the following:

1. Vessels mentioned in all the paragraphs of article 1 of the ship inspection law.

2. Vessels employed solely within the small coasting limit or the smooth-water limit.

3. Sailing vessels under 100 tons gross and employed solely within the large coasting limit.

4. Vessels employed solely in fishing, towing, salvage, dredging, or hydrographic purposes, and those especially exempted by the competent minister of state.

Article 2. Except in cases especially provided for by the competent minister of state, a vessel shall have her loadline assigned and marked when she is proceeding to sea for the first time as a vessel required to have the loadline under this law. A vessel, which is to be built in the place where this law is in force, may have her loadline assigned during construction.

Article 3. Except in cases specially provided for by the competent minister of state, the loadline shall be assigned by the local marine authorities having jurisdiction over the place where she is.

Article 4. When a vessel has had her loadline assigned and marked a loadline

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

certificate shall be issued to that effect.

Article 5. Except in cases specially provided for by the competent minister of state, a vessel for which the loadline has been marked under this law shall not proceed to sea with a draft submerging that loadline.

Article 6. The loadline mark shall not be concealed, altered, or obliterated except for the purposes of escaping capture by an enemy or other reasonable causes.

Article 7. An official inspector is empowered to enter a vessel at any time for inspection or to detain her from proceeding to sea if he has reason to believe that she is violating this law.

Article 8. The necessary rules for assigning and marking the loadline, and the fees to be charged, shall be regulated by the competent minister of state.

Article 9. A loadline certificate issued in accordance with this law and with rules under this law by a corporation or association for the survey and registry of shipping approved by the competent minister of state, together with the corresponding loadline mark, shall be recognized as equivalent to that issued and marked respectively under this law.

Article 10. This law shall be applicable to vessels other than Japanese vessels, being in the port within the jurisdiction of this law.

Article 11. When the loadline law and rules of a country to which the vessel in question in the preceding article belongs are considered appropriate by the competent minister of state, the loadline certificate issued under that law and rules, and the corresponding loadline mark, shall be recognized as equivalent to that issued and marked respectively under this law.

The provisions of the preceding paragraph shall not apply to vessels belonging to a foreign country which does not recognize the validity of the loadline certificate issued under this law and the corresponding loadline mark.

Article 12. Except in cases specially provided for by the competent minister of state, if a vessel is employed at sea without a loadline certificate, or proceeds or attempts to proceed to sea with the loadline mark submerged, the master of the vessel or a person acting for him shall be liable to a fine of not less than 100 yen but not exceeding 2000 yen.

Any person who contrary to the provision of article 6 conceals, alters, or obliterates the loadline mark shall be liable to the fine prescribed in the preceding paragraph.

Article 13. Any person who has obtained a loadline certificate by fraudulent or improper means shall be liable to imprisonment for a period not exceeding one year or to a fine not exceeding 1000 yen.

The provisions of the preceding paragraph shall also apply to a person who has violated the provisions contained therein outside the bounds of the empire.

Article 14. Any person who resists or impedes the inspection of the official inspector or violates the order detaining the vessel shall be liable to a fine not exceeding 1000 yen.

Supplementary Rules

Article 15. The date of enforcement of this law shall be fixed by the imperial ordinance.

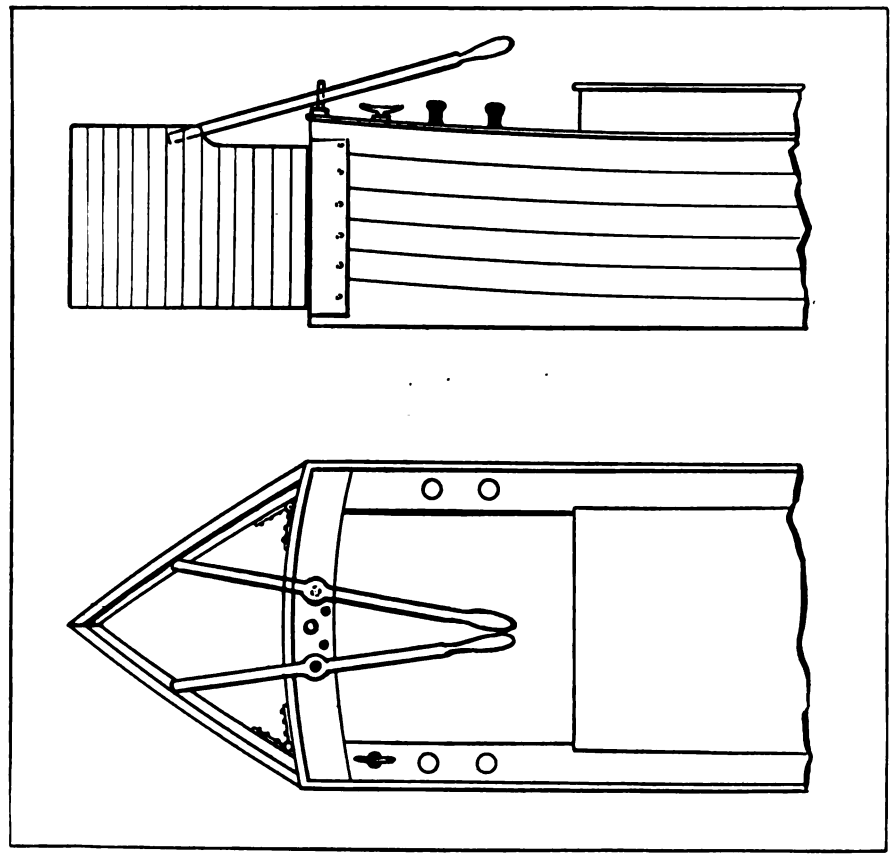
Article 16. Japanese vessels holding, at the time of the enforcement of this law, a loadline certificate issued by a corporation or association for the survey and registry of shipping approved by the competent minister of state and having the corresponding loadline mark shall be recognized as having the loadline certificate under this law and the mark corresponding thereto.

The provision of the preceding paragraph shall be applicable to any vessel other than a Japanese vessel which may be in a port within the jurisdiction of this law at the time of enforcement of this law, so long as she remains in that port.

Article 17. For Japanese vessels not coming within the provisions of the first paragraph of the preceding article this law shall not be applied until the loadline is assigned in accordance with the regulations provided for by the competent minister of state.

Adjustable Prow for Canal Barges

Slow speed from water resistance has always been a problem for owners of the many types of barges and boats used on the canals of France. With a view to cutting down if not eliminating this difficulty, the device shown in the accompanying illustration has been designed and



CANAL BARGES ARE GIVEN HIGHER SPEED BY THIS ADJUSTABLE PROW

experiments are now under way. Two slightly curvilinear movable wings are used to form a temporary prow. These wings are supported by three hinges fixed at the extremities and in advance of the barge walls.

The two wings extended come together when in use and a simple form of prow is formed. When the barge is passing through locks or when docked, the wings are released and are spread back against the barge prow. The wings move in the same manner as the rudder of a boat by means of two levers inclined and pivoted. It is claimed that experiments with this prow have resulted in lowering water resistance 23.5 per cent.

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Equipment Used Afloat, Ashore

Wire Brush Cleaner—Porthole—Lantern—Packing Glands

WIRE brush cleaning of metal surfaces offers an opportunity for considerable saving of time and labor over that required by hand in removing paint, rust, scale and dirt. A wire brush of rugged design has recently been developed by the Ingersoll-Rand Co., 11 Broadway, New York, for use with one of its standard drills. It is a brush with face diameter of 5 inches and is made up of wires of a special heat-treated steel which has been found to have good wearing qualities. It is sturdily constructed.

The drill has liberal bearings to take up all the end thrust when pressing down on the work; a high speed and reliable motor, and moreover is of light weight and small overall dimensions. It can be used in sharp corners and other cramped spaces. The whole outfit weighs only 11½ pounds.

The wire brush outfit is adapted for removing paint, rust, scale and dirt from tanks, steel hulls, structural steel, sheet metal surfaces and castings.

Safety Porthole

The Mercantile Specialties Corp., 11 Broadway, New York, has purchased the American patent and sales rights of a safety porthole known as the Smithson type. The company has arranged an exhibit at the marine exposition which will duplicate that given some weeks ago in the Olympia hall, London.

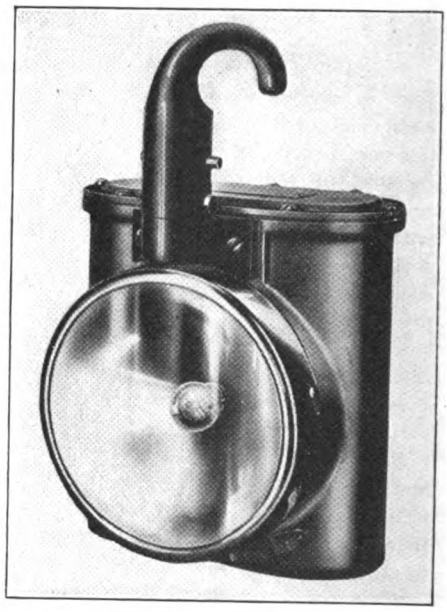
This porthole, it is said, can be opened or closed in one second. It is watertight and easily operated. The port is designed so that opening by a passenger can be prevented by a locking device. The watertight qualities are obtained by a uniform pressure on the packing joint around the port designed to prevent leakage as well as any breakage of glass. The company states that a 14-inch port under test sustained a hydraulic pressure up to 8.66 tons. At this pressure the glass cracked but the mechanism of the port showed no distortion and operated freely. The rotating ring of the port with its wedge block easily engages with or is disengaged from the lugs on the base form. The device has been installed on a number of seagoing vessels.

Design Safety Lantern for Tankers

The inflammable nature of the air in the pump rooms of oil tankers has led the Standard Oil Co. to install several hundred fire and explosive proof lanterns in these rooms. Special brackets were made for mounting several lanterns on the wall of each pump room. These lanters are watertight, extensive experiments to obtain this feature having been made by the manufacturer, the American-LaFrance Fire Engine Co., Elmira, N. Y.

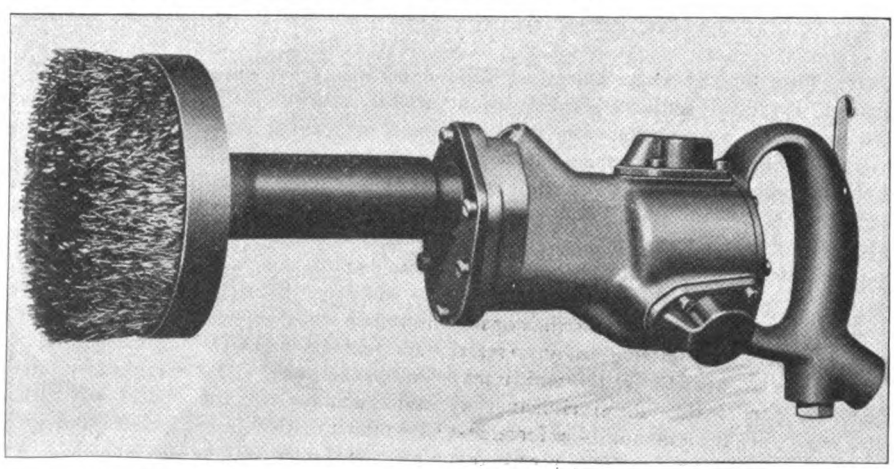
Several improvements are embodied in these lanterns. The focusing device at the back of the lantern, which enables the light to be corrected at any time, is provided with a stuffing box to prevent leakage. The new front arrangement, while water and gas tight, makes possible quick change or replacement of the glass lens or the lamp bulb, without screw driver or other tools.

A hook handle is provided to permit the lantern to be hung anywhere. This handle has been so designed as to be more readily taken off, or assembled and made watertight. A spring snap switch is so located that the light is turned off with the same hand which carries the lantern. This operates to save the battery as the light is more likely to be turned off when not in use. The glass lenses for the Standard Oil Co. lanterns were of special design. They are bullet proof, nonshatterable glass



SAFETY LANTERN FOR USE ON TANKERS

to protect the lamp bulb and to prevent the entrance of gas in case the lens becomes cracked.



POWER DRIVEN WIRE BRUSH FOR CLEANING PAINT AND SCALE FROM METAL SURFACES

The annual report of the Port Arthur Shipbuilding Co., Port Arthur, Ont., for the year ended June 30, shows gross profits of $216,070, compared with $538,369 for the previous year and net earnings of $61,909 against $301,214. President James Whalen stated that shipbuilding had been at a standstill during the year and the management had pushed the development of other work to keep the plant busy. The company has been building pulp and paper making machinery and has also decided to manufacture low pressure boilers for heating purposes.

Total tonnage of the 27 sailing vessels of the Alaska salmon-fishing fleet arriving in San Francisco this season is 33,882, and the four steamers 2980 tons.

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

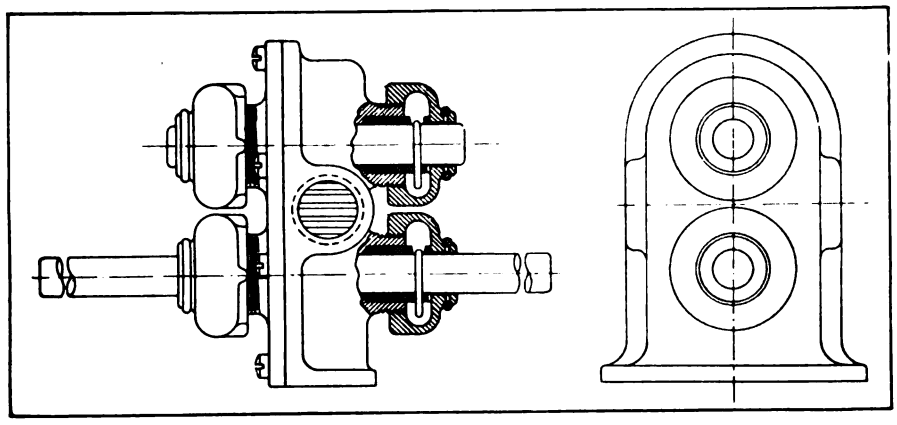
Packing Glands for Marine Pump

The Arrow Pump Co., Buhl building, Detroit, has recently developed a line of rotary geared pumps for marine engine cooling. In these pumps, as in all others manufactured by this firm, its own design of self-lubricating packing glands is employed. This construction, it is claimed, eliminates problems such as leaky glands, scored shafts and worn bearings due to improper lubrication.

Since in this construction the packing is located between the water being pumped and the bearings, no water or foreign matter carried by the water can enter the bearings. The bearings are, therefore, fully protected and have at all times a film of oil to prevent wear. Long life of the shaft and bearings is said to be the result and the gears in the pump are kept in their proper relation which makes for a long pumping life.

The packing glands in this construction are so arranged in combination with an adjustment nut and oil reservoir as to permit the use of a ring oiling device. In this automatic manner, a constant and positive flow of oil is supplied to the glands making it practical to use them as bearings. One filling of the oil reservoir, it is said, will last for months.

The pump illustrated is arranged for direct engine drive through gears but pulley and electric motor driven pumps with the same construction are also manufactured.



CROSS SECTION SHOWING DESIGN OF PACKING GLANDS

Late Marine Patents

Copies of any one of these patents can be obtained by forwarding 25 cents in stamps to Siggers & Siggers, patent attorneys, National Union building, Washington, and mentioning MARINE REVIEW.

1373067—Anchor, E. Goodreau, Cordova, Alaska.

1373267—Method of building reinforced concrete ships, Russell B. Smith, New York.

1373327—Boat transporting apparatus, J. J. R. Haalck, Bakersfield, Cal.

1373328—Depth control for submarines, Allen Hoar, Long Beach, Cal., assignor by mesne assignments to L. A. Submarine Boat Co., Long Beach, Cal.

1376223 Tongs, Henry D. Deam, Benton Harbor, Mich.

1376632 Automatic propeller governor for boats, H. J. Nielsen, San Francisco.

1384049—Machine for securing end closures in vessels, Frederick Coates, Wyoming, O., assignor to Federal Products Co., Cincinnati.

1376536 Disappearing gun for submarines, Thomas McC. Gunn, New York, assignor to Electric Boat Co., a corporation of New Jersey.

1384140—Ship, Bynum B. McCroskey, Oakland, Cal.

1384410—Ship construction, George K. Smith, New York.

1384736—Steam condenser, Hartley O. Baker, and William P. Cook, Pueblo, Colo., assignors to the Baker Steam Motor Car Co., and Mfg. Co., Inc., Pueblo, Colo.

1384745—Steering mechanism for dirigible bodies, Kennedy Dougan, Minneapolis.

1384824—Mushroom anchor, William R. Cass, Seattle, Wash.

1384825—Anchor, Albert R. Chance, Centralia, Mo.

1384258—Lifeboat supporting apparatus, Donald MacBeth, Montreal, Que., Can.

1385488—Disappearing device for boats, Andrew Dyas McLean, Toronto, Ont., Can.

1385581—Life preserver, George H. Pallady, Redondo, Cal.

1385645—Cable or rope connector or anchor, John Henry Rosemeyer, Elmira, Idaho.

1385790—Tubular ship's hull, Giuseppe Vitulli Montabull, Rome, Italy.

1385820—Pneumatic rivet passing apparatus, William B. Furman, Chester, Pa.

1385840—Steering gear for ships, Charles M. Manly, Buffalo.

1385911—Coating of ship screw shafts, August Freeze, Danzig, Germany, assignor to Society "Freese Patent," Eisenchutz, und Schraubenwellenbekliedunf fur Schiffe, G. M. B. H. Charlottenburg, Germany.

1385921—Anchor, Alexander McNabb, Bridgeport, Conn.

Business News for the Marine Trade

Capitalized at $1,000,000, the Port Jefferson Ship Yard Corp. recently was incorporated in Delaware. The company is represented by the Delaware Registration Trust Co., Wilmington, Del.

Capitalization of the Skaneateles Boat & Canoe Co., Skaneateles, N. Y., recently was increased from $40,000 to $65,000.

The Tri-National Steamship Corp. recently was incorporated in Delaware with a capital stock of $4,000,000, by Benjamin W. Morse, J. Fred Hall and Walter McGowan. The company is represented by the Charter Service Co.

The International Salvage Corp. recently was incorporated in Delaware with a capital stock of $200,000, and is represented by the Corporation Trust Co. of America, Wilmington, Del.

Capitalized at $100,000, the Ludwig Lines, New York, recently was incorporated to engage in navigation, by D. K. Ludwig, R. L. Coffey and B. F. Hodes, all of New York.

The Macropoulos Co., New York, has been incorporated with $10,000 capital stock to engage in business as ship broker, by C. D. and P. D. Macropoulos and B. Green, all of New York.

The H. W. Sweet Shipyard & Machine Works, Inc., Greenport, N. Y., recently was incorporated with a capital stock of $75,000, by H. W. Sweet, F. B. Corey and C. W. Thorn. The company will operate a shipbuilding plant and general machine construction and repair works.

The name of the Nichols Trading Co., New York, recently was changed to the United Marine Towing Co.

The Indian Transportation & Navigation Co. recently was incorporated in Delaware with a capital stock of $25,000, to engage in the operation of boats, vessels, etc.

To own and operate vessels and boats of all kinds, the Ruth E. Merrill Corp. recently was incorporated in Delaware with a capital stock of $100,000.

Capitalized at $300,000, the Parr Steamship line recently was organized in California to engage in navigation, etc.

J. P. Magill and his son J. B. Magill, formerly of Harriss, Magill & Co., Inc., New York, Philadelphia and other ports, have announced their partnership under the name of J. P. Magill & Son, for the purpose of engaging in a general steamship agency and brokerage business. New York offices are at 78 Broad street, in the Maritime Exchange building.

Freight-handling machinery estimated to cost about $75,000, will be installed on the proposed dock to be constructed by the department of docks, New York, on the Hudson river, north of Spuyten Duyvil creek.

What is said to be the smallest floating drydock on the Atlantic coast is now ready for use at the yards of the Bertelsen & Peterson Engineering Co., East Boston, Mass. The new dock is 175 feet long and 40 feet wide and has been built to accommodate vessels up to 400 tons, making it convenient for vessels within the tonnage to undergo underwater inspection without being hauled out on the marine railway.

The Clinton Shipbuilding & Repair Co., Philadelphia, has closed a contract with a Mexican firm for building a fleet of small, open, galvanized steel barges. These vessels will be used for lightering bananas, sugar cane and mahogany in shallow rivers and over the bars on the east coast of Mexico.

It is reported the Bethlehem Shipbuilding Corp. will turn its Alameda, Cal., plant to the manufacture of diesel engines.

Capitalized at $5000, the Lockport Dry Dock Co., New York, recently was incorporated by J. W. Stone, B. L. and L. L. Cowles, all of Buffalo.

G. C. Madill, T. H. Huff and C. T. Porter, Ogdensburg, N. Y., recently were named as

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

the incorporators of the St. Lawrence Boat Works, New York, which was recently chartered under the laws of New York state with a capital stock of $25,000.

The United States & China Steamship Co. recently was incorporated in Delaware with a capital stock of $3,000,000.

The Marine Fuel Oil Corp. recently was incorporated in Delaware with a capital stock of $200,000.

To operate boats of all kinds, the Oceanic Ferries Co. recently was incorporated in Delaware with a capital stock of $5,000,000.

Capitalized at $450,000, the Charter Oak Steamship Co. recently was incorporated in Delaware by Raymond E. Stefferson, F. G. Blinne and Alex M. Hamburg, all of New York.

The Service Shipping & Forwardnig Co., New York, recently was incorporated with a capital stock of $20,000, by A. Murphy, A. and M. McQuillen, all of New York.

The Maryland Wrecking Co., Inc., Baltimore, has purchased the Carolina shipyard at Wilmington, N. C., from George W. Fuller & Co.

The Ottoman-American Steamship Co. has been incorporated in Delaware with a capital stock of $500,000.

The Schubert & Trevor Co., New York, ship and yacht equipment, recently was incorporated with a capital stock of $25,000, by H. G. and G. S. Trevor and R. M. Schubert. The company is represented by C. C. Daniels, 20 Broad street, New York.

The Valley Welding & Boiler Co., Shelby county, Tenn., has been incorporated with a capital stock of $15,000, by Leroy Worsham, W. E. Young, B. F. Worsham, R. W. Taylor and Estes Young.

The Brooklyn Burnall Fuel Saver Corp., Brooklyn, N. Y., recently was incorporated with a capital stock of $50,000, by G. H. and G. M. Jackson and L. Reimer, to engage in the manufacture of fuel saving equipment, etc. The company is represented by Benjamin Krauss, 233 Broadway, New York.

The Burrard Dry Dock Co., Ltd., North Vancouver, B. C., recently was incorporated with a capital stock of $1,000,000, by Clarence Wallace, John J. Coughlan and Robert S. Lennie. The company is planning the erection of a floating drydock.

To manufacture wireless equipment, etc., the Northern Radio & Electric Co., Seattle, recently was incorporated by R. W. Bell and H. S. Tenny. The company is represented by McClure & McClure, Hoge building, Seattle.

The Kelly & Jones Co., Pittsburgh, maker of pipe fittings, valves, etc., recently purchased a building in Chicago, where it plans to establish a branch manufacturing plant.

The Union Chain & Mfg. Co., Seville, O., has purchased the old factory building of the Sandusky Drop Forge Co., Sandusky, O., and will occupy it as soon as alterations are completed.

New Trade Publications

UNIVERSAL VISE—The Oliver Machinery Co., Grand Rapids, Mich., has published a 4-page illustrated folder in which a universal vise for patternmakers and woodworkers is described and illustrated. The jaws of this vise are 7¼ inches wide, 18 inches long and will open up to 16 inches.

FORGE FURNACES—The W. S. Rockwell Co., New York, is circulating an 8-page illustrated booklet in which economizer shield type forge furnaces are described and illustrated. The design of these forges includes an economizer over the working opening, which according to the booklet recovers a large percentage of the heat ordinarily wasted, and also a novel arrangement of air blast which acts as a barrier between the heater and the spent gases. The furnaces are described in detail and the illustrations show actual installations.

WROUGHT HARDWARE—The Stanley Works, New Britain, Conn., has just published a 376-page general catalog, 6½ x 9½ inches. This book contains additions to the company's line of wrought hardware as well as the old products of the company.

TANKS—The Youngstown Boiler & Tank Co., Youngstown, O., has published a 24-page illustrated booklet in which storage tanks of various kinds are described and illustrated. The tanks are manufactured in capacities ranging from 400 gallons to 55,000 barrels, and are for the storage of gasoline, alcohol, benzol, asphalt, grease, brine, fuel oil, water, oils, soaps, benzine, chemicals, naphtha, acids, tar, paint, varnish, etc. An interesting and valuable part of the booklet is a table of capacities.

BABBITT METAL—The Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa., is circulating a 12-page illustrated booklet in which instructions as to the use of babbitt metal, which it has placed on the market, are given.

RIVET GUN—The Pennsylvania Flexible Metallic Tubing Co., Philadelphia, is circulating a small folder in which a rivet gun, designed for passing rivets, is described and illustrated. As each rivet is heated it is set by the heater on a valve in an opening in the head of the gun. By its own weight the rivet opens the valve and enters the machine. Automatically the valve recloses and the rivet is prepared to be sent on its journey by a single press of a foot treadle. This operation releases the compressed air into the head of the machine and sends the hot rivet through the enclosed flexible tubing. The rivet is shot into the receiver at the end of the tubing, where the holder-on can easily remove it. An outstanding feature of the gun is the elimination of all danger in the passing of rivets. It is claimed that by use of the gun a saving of 20 per cent in rivet passing is possible. Full details are given.

TRANSMISSIONS—The Oilgear Co., Milwaukee, is circulating three bulletins under one cover in which variable speed hydraulic power transmissions are described and illustrated. Details are given as to construction and application. The first bulletin deals with application to machine tools, the second to feed control units construction and application and the third to variable speed drive. The data given are interesting.

TOOL STEEL—A cardboard circular has been published by the Vanadium-Alloys Co., Latrobe, Pa., one side of which contains advice from a practical man on the hardening of tool steel. The other side of the circular lists the company's various tool steels.

RADIAL WALL DRILLS—Pawling & Harnischfeger Co., Milwaukee, is circulating an 8-page illustrated bulletin in which radial wall drills are described and illustrated. Examples of interior and exterior drilling of large steel drums, and the drilling and reaming of structural material are shown as well as dimension drawings and data. A list of users is given. Full details and specifications are included.

VALVES—Reducing valves, pump governors, pressure regulators, hot water tank regulators, control valves and damper regulators are described and illustrated in a 20-page booklet recently published by the Atlas Valve Co., 282 South street, Newark, N. J. The booklet gives complete information, illustrates, describes and lists all sizes, etc.

CRANES—The Whiting Corp., Harvey, Ill., has published an 80-page illustrated booklet in which cranes are described and illustrated. These include electric traveling, bucket-handling, gantry, transfer, handpower, jib, pillar and bracket cranes. In addition lifting attachments, and railway specialties are described and illustrated. Full details are given, a chapter being devoted to each type of crane.

Business Changes

FOR a consideration of $130,000 the Westinghouse Electric & Mfg. Co., East Pittsburgh, Pa., has completed purchase of the manufacturing plant of the Kilbourne & Clarke Mfg. Co., Seattle. The latter firm has been manufacturing wireless sets for several years and recently completed a plant in the industrial section of Seattle. Acquirement of this property by the Westinghouse interests will provide facilities for assembling and testing electrical machinery, constructing switchboards and panels, warehousing products and housing the sales organization. It is planned to ship parts to the Seattle plant where they will be assembled, tested and shipped to destination.

* * *

The William S. Walker Co., advertising, Park building, Pittsburgh, has just opened an office at 340 Leader-News building, Cleveland. For the first few weeks this will operate as a sales office but after Jan. 1, it will be a service office.

* * *

E. G. Gilbertson & Co., Inc., formerly at 111 Broadway, New York, have moved into larger quarters in the Barrett building, 40 Rector street, New York. The company specializes in boiler tubes, manufacturing steel tubing for all purposes.

* * *

Announcement has been made of the removal of the offices of the International Freighting Corp. to rooms 1031 to 1034 at 44 Whitehall street, New York.

* * *

European representation of the United American Lines, Inc., 19 Broadway, New York, has been placed in Col. W. B. Ryan, vice president of the company, who will make his headquarters in London.

* * *

Offices have been taken in the Allied Machinery Center, 141 Center street, New York, by George L. Sawyer as New York representative of the Universal Crane Co., Elyria, O. Mr. Sawyer formerly was sales manager of material handling machinery for the Barber-Greene Co., Aurora, Ill.

* * *

George A. Armes has acquired the Muir & Simons Machine Works at San Francisco as a unit of a new shipbuilding and repair plant he has organized.

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

TECHNOLOGY DIVISION

MARINE REVIEW

LONDON NEW YORK CLEVELAND

Registered U. S. Patent Office

Published Monthly
Vol. 51, No. 3

MARCH, 1921

Entered as second-class matter at the post-office in Cleveland, Ohio, under the act of March 3, 1879

35 Cents a Copy
$4.00 a Year

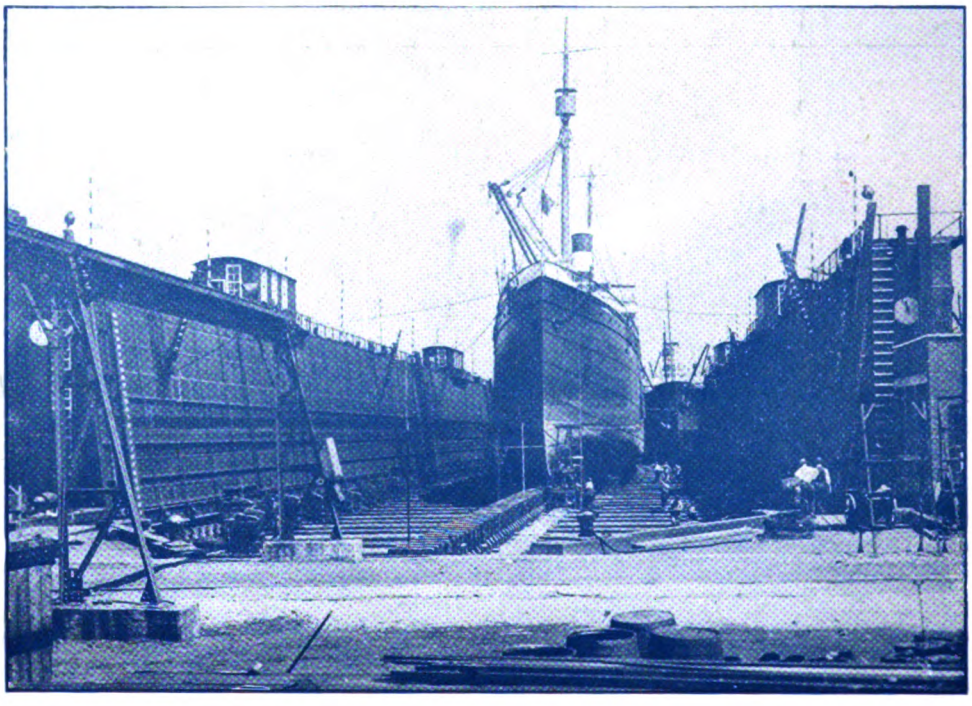
Alphabetical List of Advertisers, page 96 Contents, page 5 "Where to Buy," page 62 Classified Advertisements, pages 94-95

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

W. & A. FLETCHER CO.

12th to 14th St., HOBOKEN, N. J., U. S. A.

TELEPHONE 312 HOBOKEN



VIEW OF

Dry Dock In Operation

Length on keel blocks, 440' 0".
Lifting capacity, 8500 Tons.

Marine Engineers and Ship Repairers
Contractors for Complete Vessels
Builders of Parsons' Turbines, Engines, Boilers and the Propelling Machinery for over 300 ships.

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

P
AP 22 '21
TECHNOLOGY DIVISION

MARINE REVIEW
LONDON NEW YORK CLEVELAND

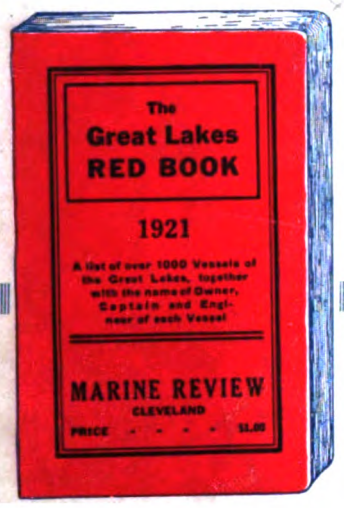
Registered U. S. Patent Office

Published Monthly
Vol. 51, No. 5

MAY, 1921

Entered as second-class matter at the post-office in Cleveland, Ohio, under the act of March 3, 1879

35 Cents a Copy
$4.00 a Year


The
Great Lakes
RED BOOK
1921
A list of over 1000 Vessels of the Great Lakes, together with the name of Owner, Captain and Engineer of each Vessel
MARINE REVIEW
CLEVELAND
PRICE - - - - $1.00

Order Your Copy Today

THE 18th Annual Edition of *The Great Lakes Red Book* is a complete list of vessels plying the Great Lakes, with the names of the owner, captain and engineer of each vessel.

In addition it contains a list of ore carriers and shows the tonnage capacity of each.

All boats are listed twice, once by fleets, giving the name and address of owner, and the names of the captain and engineer. The second list is arranged alphabetically according to the name of the boat, and shows the fleet number.

Because of its convenient vest-pocket size, *The Great Lakes Red Book* is depended upon by vesselmen and others interested in *Great Lakes* trade, as the most complete, reliable and convenient directory of its kind.

1921 EDITION
NOW READY

$1.00 a Copy, Postpaid
190 Pages **Actual Size 3" x 4¾"**

The Penton Publishing Co.

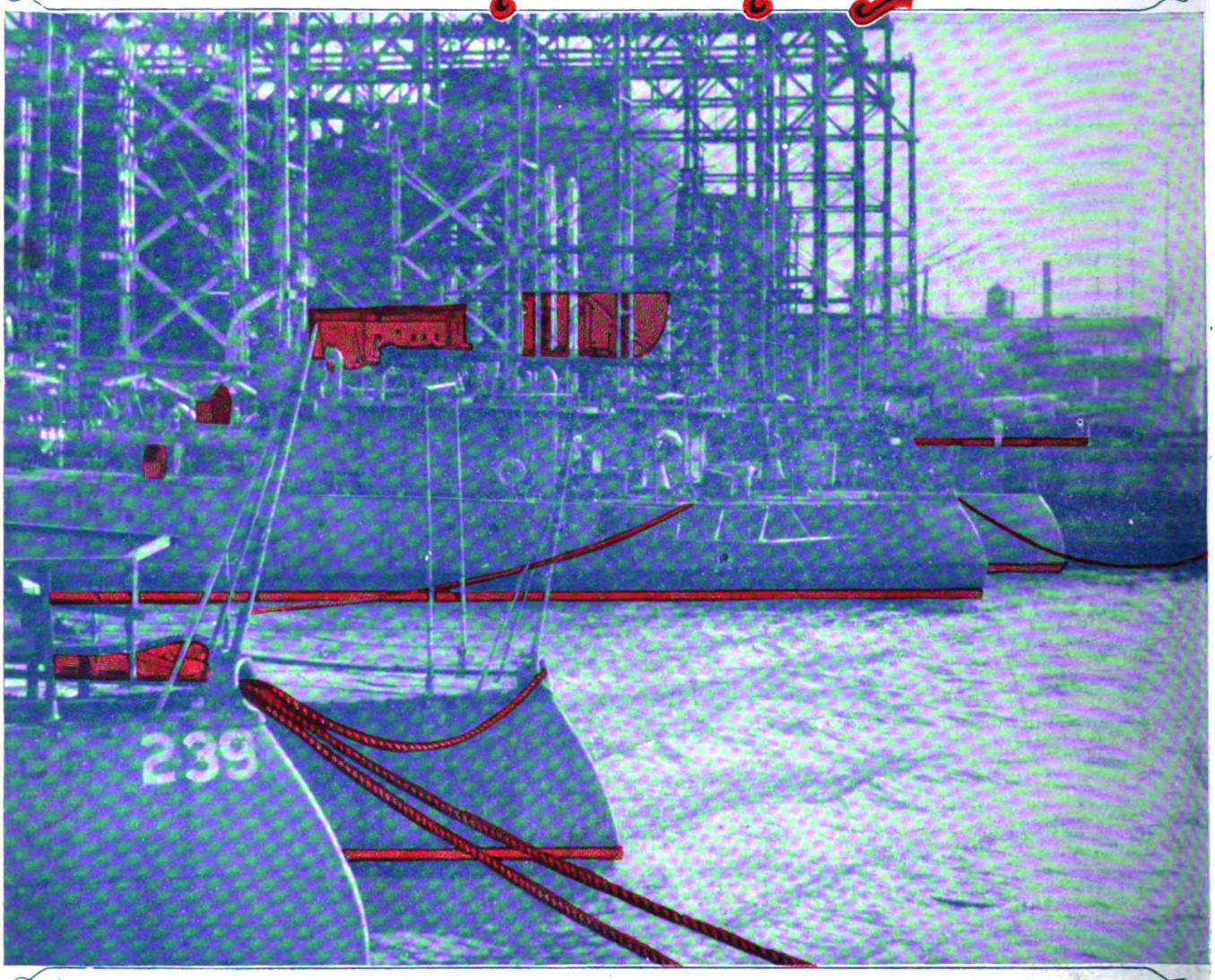
PUBLISHERS OF *MARINE REVIEW*

Penton Building Cleveland, U. S. A.

Alphabetical List of Advertisers, page 92 | Contents, page 5 | "Where to Buy," page 48 | Classified Advertisements, pages 89-91

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Character - Service Craftsmanship



Character—What It Means

In the construction of the greatest, most complicated and most beautiful machine devised by man—the ship—there is no element more important than Character.

Character in shipbuilding means character in the ship, expressed in a long life of useful and economical service.

Character is the expression of an organization in which every man, from the lowest to the highest, is animated by a keen sense of loyalty to his company and a pride in his work that finds expression in doing that work honestly and well.

NEW YORK SHIPBUILDING CORPORATION

Camden, N. J.

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

MY 23 '21 TECHNOLOGY DIVISION

MARINE REVIEW

LONDON · NEW YORK CLEVELAND

Registered U. S. Patent Office

Published Monthly
Vol. 51, No. 6

JUNE, 1921

Entered as second-class matter at the post-office in Cleveland, Ohio, under the act of March 3, 1879

35 Cents a Copy
$4.00 a Year

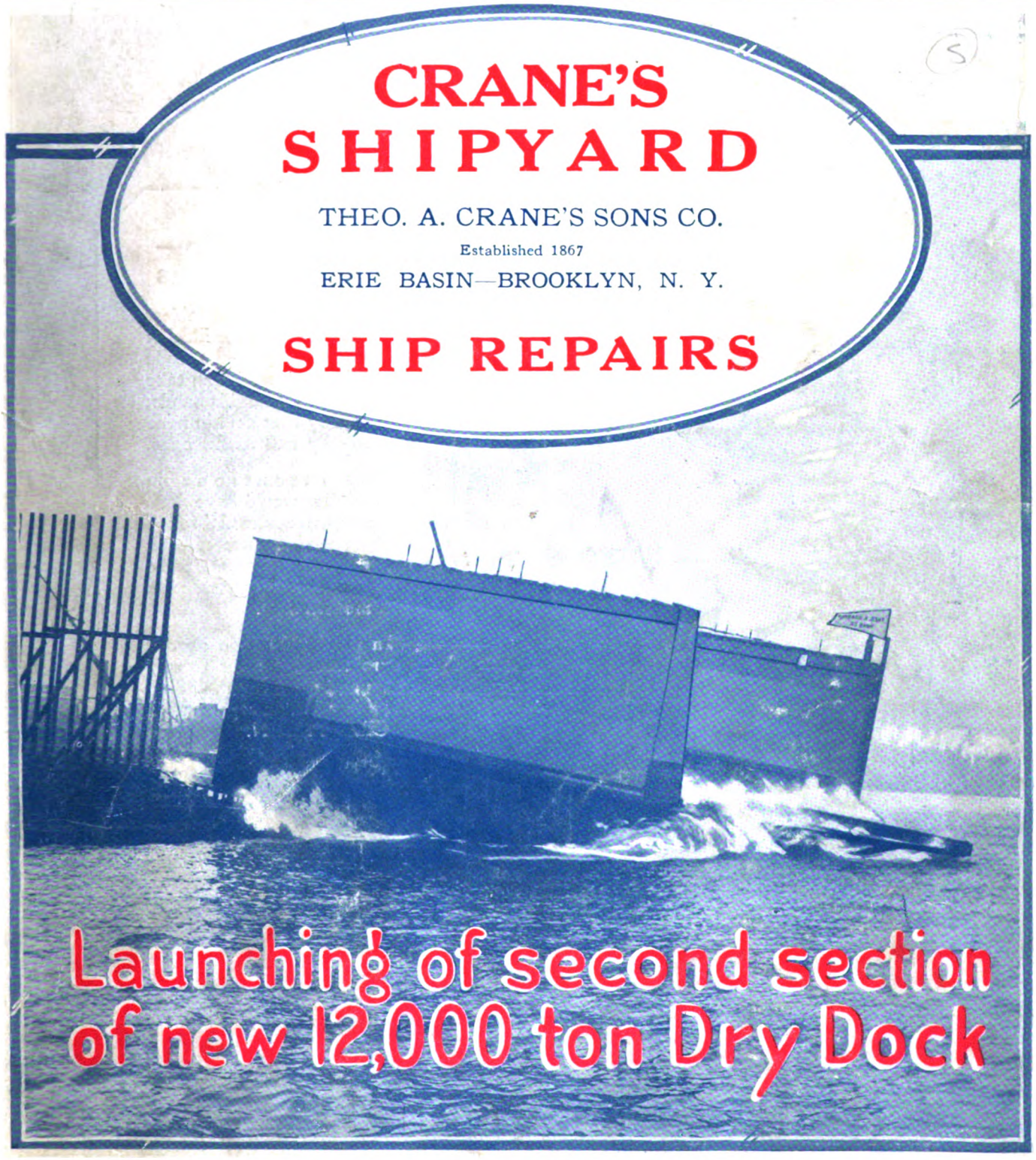
CRANE'S
SHIPYARD

THEO. A. CRANE'S SONS CO.

Established 1867

ERIE BASIN—BROOKLYN, N. Y.

SHIP REPAIRS



Launching of second section of new 12,000 ton Dry Dock

Alphabetical List of Advertisers, page 80 · Contents, page 5 · "Where to Buy," page 40 · Classified Advertisements, pages 78-79

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from NEW YORK PUBLIC LIBRARY

Craftsmanship—What It Means

One of the oldest and noblest of human ideals is the ideal of the Craftsman—the code which bids the workman take pride in the skill of his hands, and employ that skill in none but worthy and useful ends.

Good intentions in shipbuilding would have little value unless expressed through skill in performance of each and all the complex tasks involved in the construction of a modern ship.

In the 19,000 men on our payroll, we have for twenty years and more been building up, primarily, an organization of CRAFTSMEN.

NEW YORK SHIPBUILDING CORPORATION

Camden, N.J.

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-08-28 00:03 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

ANNUAL OPERATING NUMBER

MARINE REVIEW

LONDON NEW YORK CLEVELAND

Registered U. S. Patent Office

Published Monthly
Vol. 51, No. 7

JULY, 1921

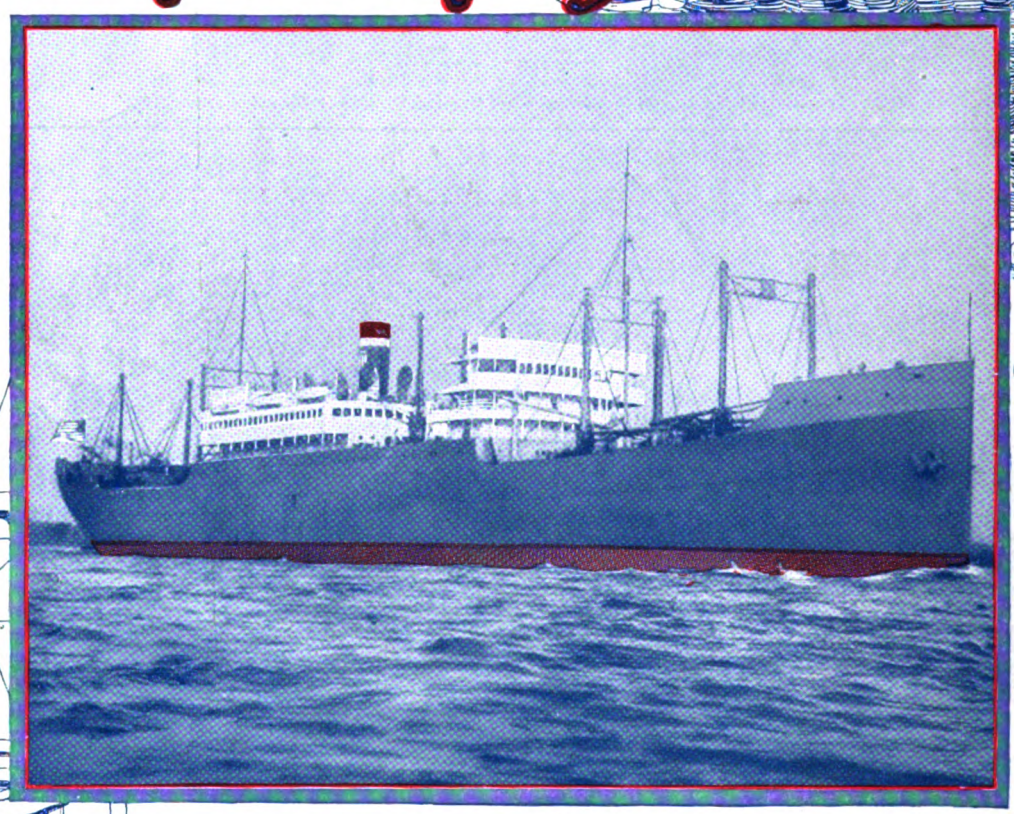
Entered as second-class matter at the post-office in Cleveland, Ohio, under the act of March 3, 1879

35 Cents a Copy
$4.00 a Year

Alphabetical List of Advertisers, page 50 | Contents, page 5 | "Where to Buy," page 40 | Classified

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Character—Service Craftsmanship



SERVICE—What It Means

An organization including men fitted by actual experience to appreciate problems of design from the point of view of the shipowner as well as of the builder.

A research department constantly studying ocean freight conditions for the benefit of all our clients.

A keen realization that what is for the benefit of the shipowner is also in the long run for the benefit of the shipbuilder.

NEW YORK SHIPBUILDING CORPORATION
Camden, N.J.

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

TECHNOLOGY DIVISION

MARINE REVIEW

LONDON NEW YORK CLEVELAND

Registered U. S. Patent Office

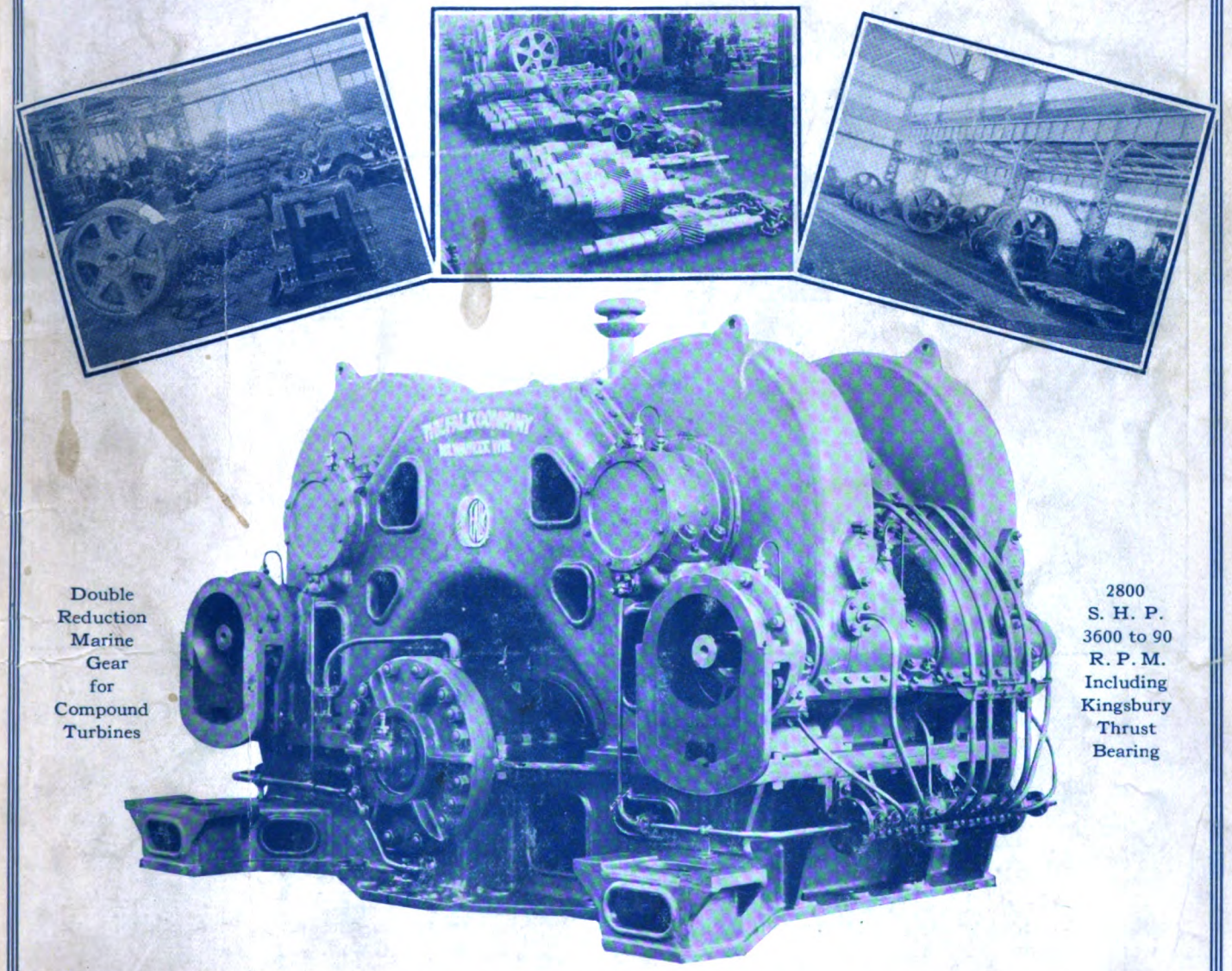
Published Monthly
Vol. 51, No. 8

AUGUST, 1921

Entered as second-class matter at the post-office in Cleveland, Ohio, under the act of March 3, 1879

35 Cents a Copy
$4.00 a Year

MARINE GEARS



Double Reduction Marine Gear for Compound Turbines

2800 S. H. P. 3600 to 90 R. P. M. Including Kingsbury Thrust Bearing

THE FALK CORPORATION

Successor to THE FALK COMPANY

MILWAUKEE WISCONSIN

Representatives:

M. P. FILLINGHAM, 50 Church St., New York City
F. W. GRIMWOOD, Rialto Building, San Francisco, Cal.
W. O. BEYER, 1007 Park Building, Pittsburgh, Pa.
ENGINEERING EQUIPMENT CO., Ltd., 263 St. James St., Montreal, Canada
Foreign: GUSTAV MELMS, 3 Rue Taitbout, Paris.

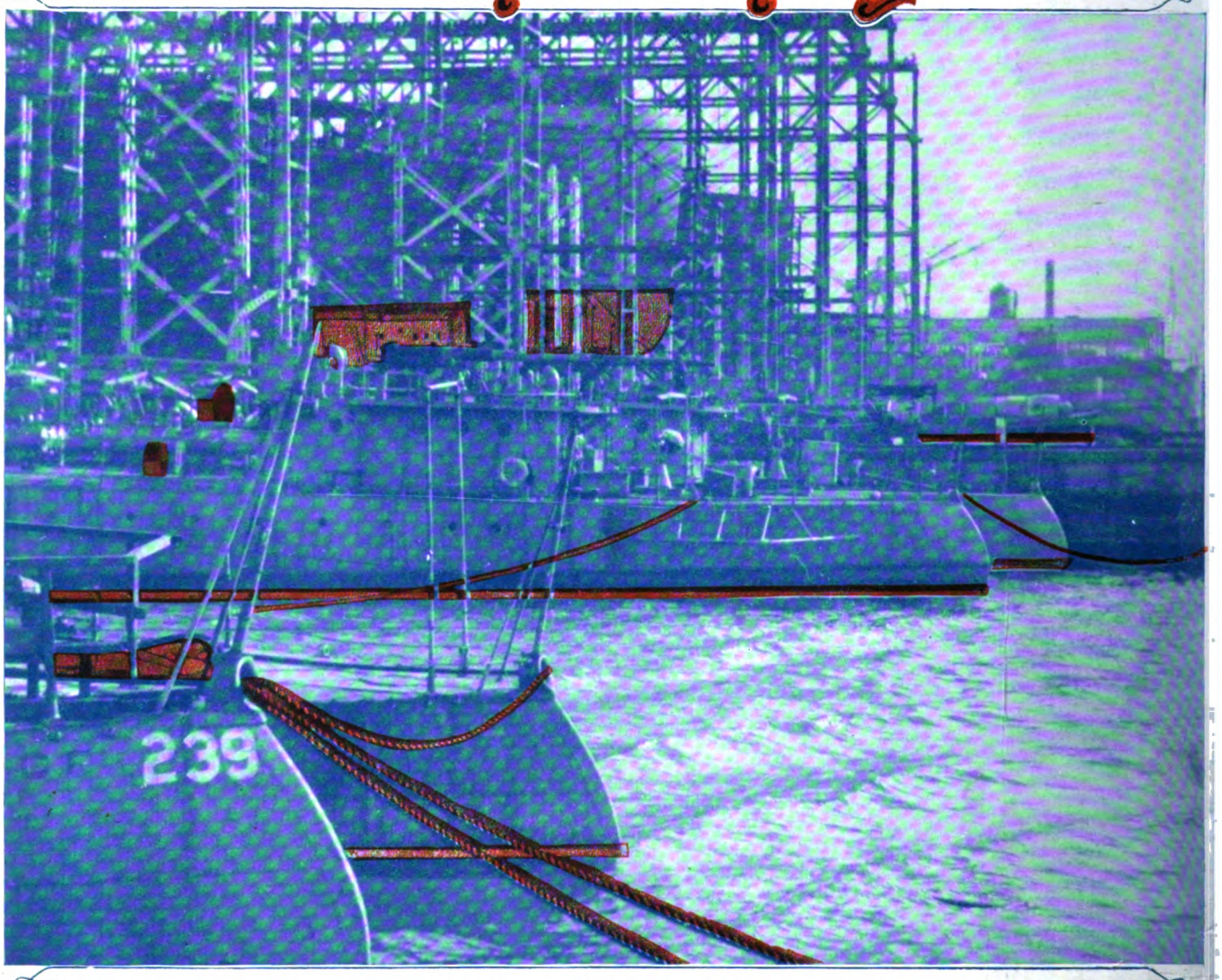
Alphabetical List of Advertisers, page 78 | Contents, page 5 | "Where to Buy," page 40 | Classified Advertisements, pages 76-77

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from NEW YORK PUBLIC LIBRARY

Character - Service Craftsmanship



Character—What It Means

In the building of the greatest, most complicated and most beautiful machine devised by man—the ship—there is no element more important than Character.

Character in shipbuilding means the production of vessels which can be depended upon to more than repay to their owners, in years of faithful, efficient service, the original cost of their construction.

Character in shipbuilding cannot exist except as the reflection of an organization whose every member, from the highest to the humblest workman, is animated by a loyalty to his company and a pride in his work that finds expression in doing that work, in every detail, honestly and well.

NEW YORK SHIPBUILDING CORPORATION

Camden, N.J.

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

TECHNOLOGY DIVISION
AG 24 '21

MARINE REVIEW

LONDON NEW YORK CLEVELAND

Registered U. S. Patent Office

Published Monthly
Vol. 51, No. 9

SEPTEMBER, 1921

Entered as second-class matter at the post-office in Cleveland, Ohio, under the act of March 3, 1879

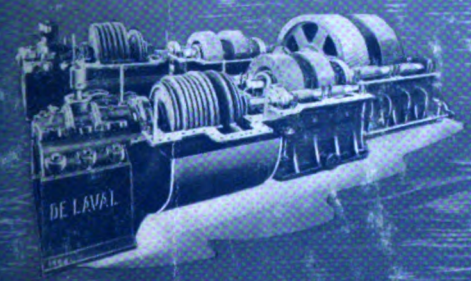
35 Cents a Copy
$4.00 a Year

You Can Get More Speed

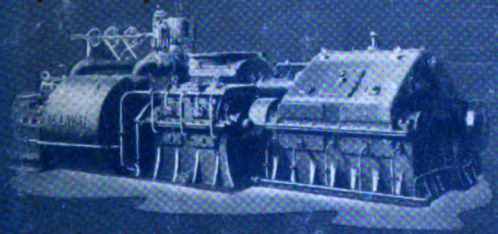
From The Same Boilers and Use Less Fuel
By Installing

DE LAVAL GEARED TURBINES

Steamship *W. M. BURTON*, 10,500 tons; 11.7 knots.



De Laval 3,300-hp. compound double-geared marine turbine; turbine speed 3,200 r.p.m.; propeller speed 90 r.p.m.



De Laval 3,300-hp. double-geared marine turbine, with casing covers removed.

FIVE 10,500-ton tankers like the one shown herewith were recently refitted with De Laval compound turbines and double-reduction gears. The substitution of De Laval geared turbines for the original equipment made it possible to raise the speed materially without any increase in boiler or condenser capacity. Compared with similar vessels driven by reciprocating engines, approximately a knot and a half greater speed is obtained from 10 per cent less total steam.

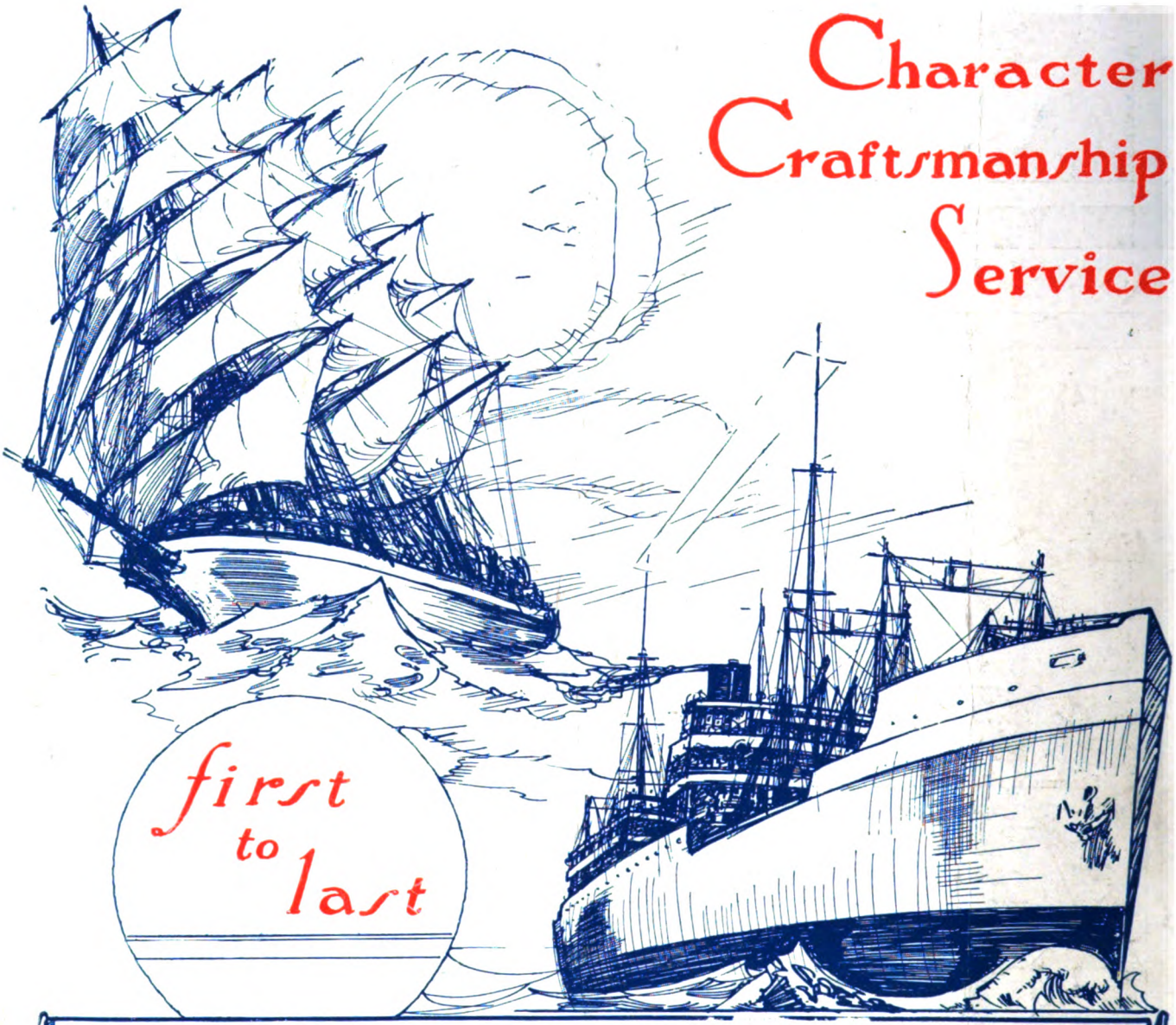
De Laval turbines are of the impulse type, with large clearances, and can be quickly reversed, permitting rapid and easy maneuvering. An interlocking gear prevents admission of steam to both ahead and astern turbines at the same time.

Over 2,000,000 h.p. of De Laval gears are giving satisfactory service. De Laval gears are practically noiseless in operation, which is not only an indication of perfect cutting, high efficiency and long life, but also is necessary for proper attention, since trouble in machinery is most often detected by hearing.

Our engineers will be glad to submit further details upon receipt of particulars relating to proposed installations.

De Laval
STEAM TURBINE CO.
TRENTON, NEW JERSEY

Generated on 2024-08-28 00:07 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



Character
Craftsmanship
Service

first to last

From the sailing ship of earlier days to the specialized, oil-burning steel cargo-carrier of today; through all its ups and downs to its present outstanding position, the American Merchant Marine has fostered and will maintain those traditions which enrich the history of sea transportation.

For nearly a quarter century, the New York Shipbuilding Corporation has contributed its skill and its ideals to the upbuilding of that which is best in our merchant and naval fleets of today. The largest single unit in America's shipbuilding capacity, New York Ship started unhampered by limitations of physical layout or inherited practices. Its founders had the vision and the ability to pioneer in the adoption and development of many shipbuilding methods now accepted as standard by all.

These ideals have been steadfastly maintained; and upon the foundation of complete plant facilities and modern steel working practice there has grown up a tradition of accomplishment in the building of good ships—ships that proudly take leadership in the greater American Merchant Marine, that reflect New York Ship's

"Character -- Craftsmanship -- Service"

NEW YORK SHIPBUILDING CORPORATION

Please mention MARINE REVIEW *when writing to advertisers*

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from NEW YORK PUBLIC LIBRARY

Marine Review

THE BUSINESS OF TRANSPORTATION BY WATER

NEW YORK CLEVELAND LONDON

Published Monthly OCTOBER, 1921 $4.00 a Year

WE CAN FURNISH ANY VALVE
OR FITTING FOR SHIP USE

CRANE CO.

836 So. Michigan Ave. Chicago, Ill.

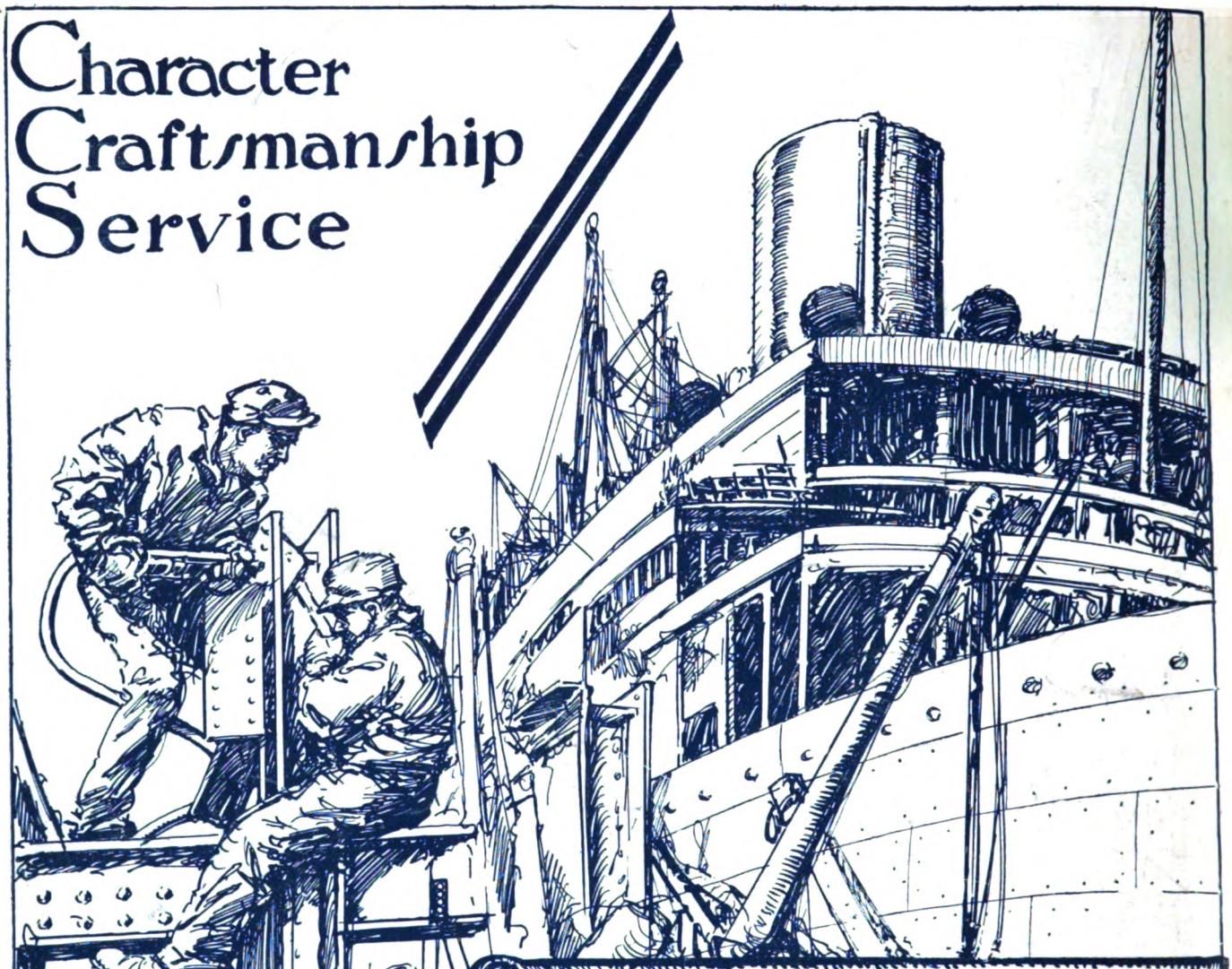
BRANCHES IN 65 PRINCIPAL CITIES

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from NEW YORK PUBLIC LIBRARY

Character Craftsmanship Service



"From Pontoon to Superdreadnought"

During the twenty-odd years of its existence the New York Shipbuilding Corporation has not only turned out many repetitions and variations of the same type of vessel, but has built vessels of almost every known marine type—literally "from pontoon to superdreadnought".

From the accomplishments of the past it is able to bring to new ship construction a wealth of experience gained in both quantity production and specialized output. The New York Ship yard is a specialist not merely in one type of vessel but in many—it might be said in all.

Passenger liners, tankers, colliers, general cargo carriers; destroyers, battleships, cruisers, mine-planters; carfloats, ferryboats, tugboats, dredges; each type, each different size or class, reflects the diversified skill, the completeness of shop and yard facilities of this great shipyard.

NEW YORK SHIPBUILDING Corporation

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

TECHNOLOGY DIVISION

Marine Review

THE BUSINESS OF TRANSPORTATION BY WATER

NEW YORK CLEVELAND LONDON

Published Monthly
Vol. 51, No. 11

NOVEMBER, 1921

$3.00 a Year
25c a Copy

DAVID J CHAMPION
PRESIDENT

W. J. REILLEY
SECY & TREAS.

MAIN OFFICE & WORKS
CLEVELAND, OHIO

VICTOR
BOILER RIVETS
ON EVERY HEAD

WESTERN PLANT
EAST CHICAGO, IND.

THE CHAMPION RIVET COMPANY
CLEVELAND, O.

SPECIALIZING SOLELY

IN

RIVETS — BOILER
SHIP
STRUCTURAL

ALSO

PINS — COUPLER
AIR BRAKE
M.C.B. Specifications

We feel we are in better position than any other manufacturer in this country to take care of your requirements in this line.

Try us out once in a while and see if our statements are not borne out by the facts.

Service - at times - counts more than Price.

Don't keep your men waiting for Rivets - There is no occasion.

Our Rivets are as perfect as their Pictures, and our Service as good as our word.

THE CHAMPION RIVET COMPANY

D. J. Champion

President

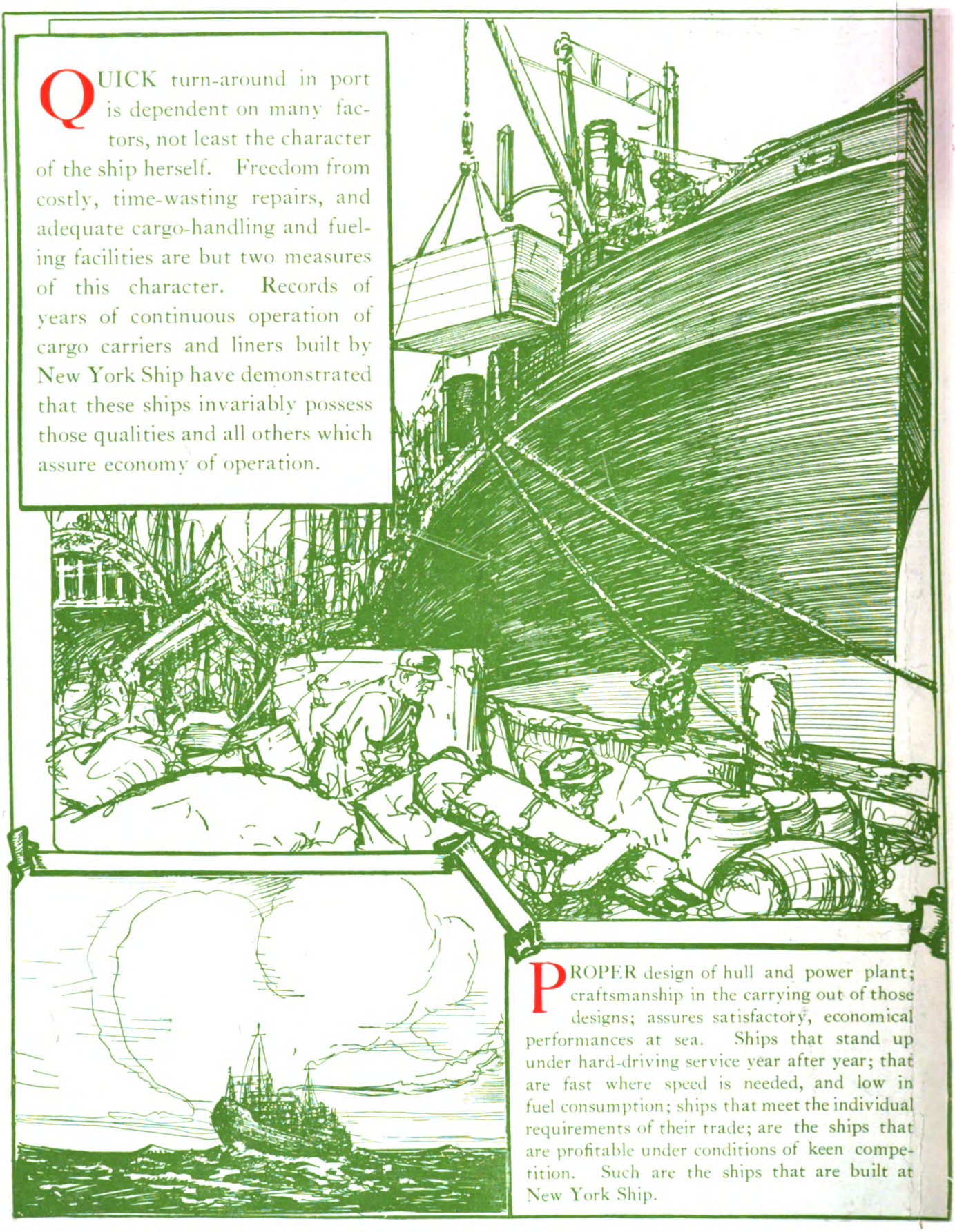
Generated on 2024-08-28 00:03 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access use#pd-google

Digitized by Google

Original from NEW YORK PUBLIC LIBRARY

CHARACTER · CRAFTSMANSHIP · SERVICE

QUICK turn-around in port is dependent on many factors, not least the character of the ship herself. Freedom from costly, time-wasting repairs, and adequate cargo-handling and fueling facilities are but two measures of this character. Records of years of continuous operation of cargo carriers and liners built by New York Ship have demonstrated that these ships invariably possess those qualities and all others which assure economy of operation.



PROPER design of hull and power plant; craftsmanship in the carrying out of those designs; assures satisfactory, economical performances at sea. Ships that stand up under hard-driving service year after year; that are fast where speed is needed, and low in fuel consumption; ships that meet the individual requirements of their trade; are the ships that are profitable under conditions of keen competition. Such are the ships that are built at New York Ship.

NEW YORK SHIPBUILDING CORPORATION

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

TECHNOLOGY DIVISION

Marine Review

THE BUSINESS OF TRANSPORTATION BY WATER

NEW YORK CLEVELAND LONDON

Published Monthly
Vol. 51, No. 12

DECEMBER, 1921

$3.00 a Year
25c a Copy

"Builders of the First Parsons Turbine Driven Vessel Built in America"

Dry Dock No. 1

W. & A. FLETCHER CO.

ESTABLISHED 1853

SHIP REPAIRERS—MARINE ENGINEERS

CONTRACTORS FOR COMPLETE VESSELS

Builders of Fletcher-Parson Geared Turbines, Marine Engines and Boilers

Main Office and Dry Docks—12th to 14th St., Hoboken, N. J., U. S. A.

Opposite 21st to 23rd St., New York City on Hudson River

Cable "Beamengine" — Telephone "312 Hoboken"

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from NEW YORK PUBLIC LIBRARY

Character
Craftsmanship
Service

first to last

From the sailing ship of earlier days to the specialized, oil-burning steel cargo-carrier of today; through all its ups and downs to its present outstanding position, the American Merchant Marine has fostered and will maintain those traditions which enrich the history of sea transportation.

For nearly a quarter century, the New York Shipbuilding Corporation has contributed its skill and its ideals to the upbuilding of that which is best in our merchant and naval fleets of today. The largest single unit in America's shipbuilding capacity, New York Ship started unhampered by limitations of physical layout or inherited practices. Its founders had the vision and the ability to pioneer in the adoption and development of many shipbuilding methods now accepted as standard by all.

These ideals have been steadfastly maintained; and upon the foundation of complete plant facilities and modern steel working practice there has grown up a tradition of accomplishment in the building of good ships—ships that proudly take leadership in the greater American Merchant Marine, that reflect New York Ship's

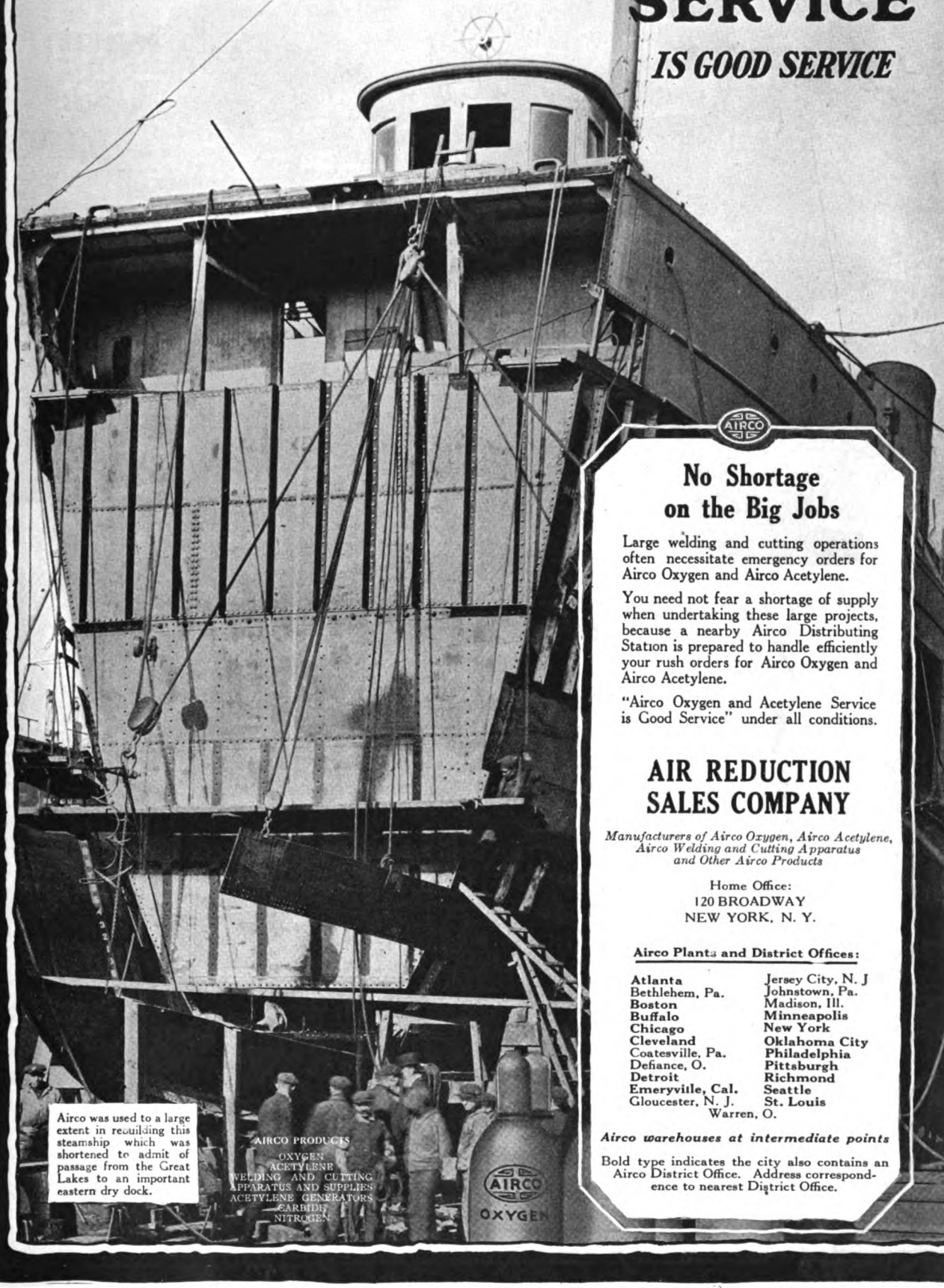
"Character - - Craftsmanship - - Service"

NEW YORK SHIPBUILDING CORPORATION

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

AIRCO OXYGEN AND ACETYLENE SERVICE

IS GOOD SERVICE



Airco was used to a large extent in rebuilding this steamship which was shortened to admit of passage from the Great Lakes to an important eastern dry dock.

AIRCO PRODUCTS
OXYGEN
ACETYLENE
WELDING AND CUTTING APPARATUS AND SUPPLIES
ACETYLENE GENERATORS
CARBIDE
NITROGEN

No Shortage on the Big Jobs

Large welding and cutting operations often necessitate emergency orders for Airco Oxygen and Airco Acetylene.

You need not fear a shortage of supply when undertaking these large projects, because a nearby Airco Distributing Station is prepared to handle efficiently your rush orders for Airco Oxygen and Airco Acetylene.

"Airco Oxygen and Acetylene Service is Good Service" under all conditions.

AIR REDUCTION SALES COMPANY

Manufacturers of Airco Oxygen, Airco Acetylene, Airco Welding and Cutting Apparatus and Other Airco Products

Home Office:
120 BROADWAY
NEW YORK, N. Y.

Airco Plants and District Offices:

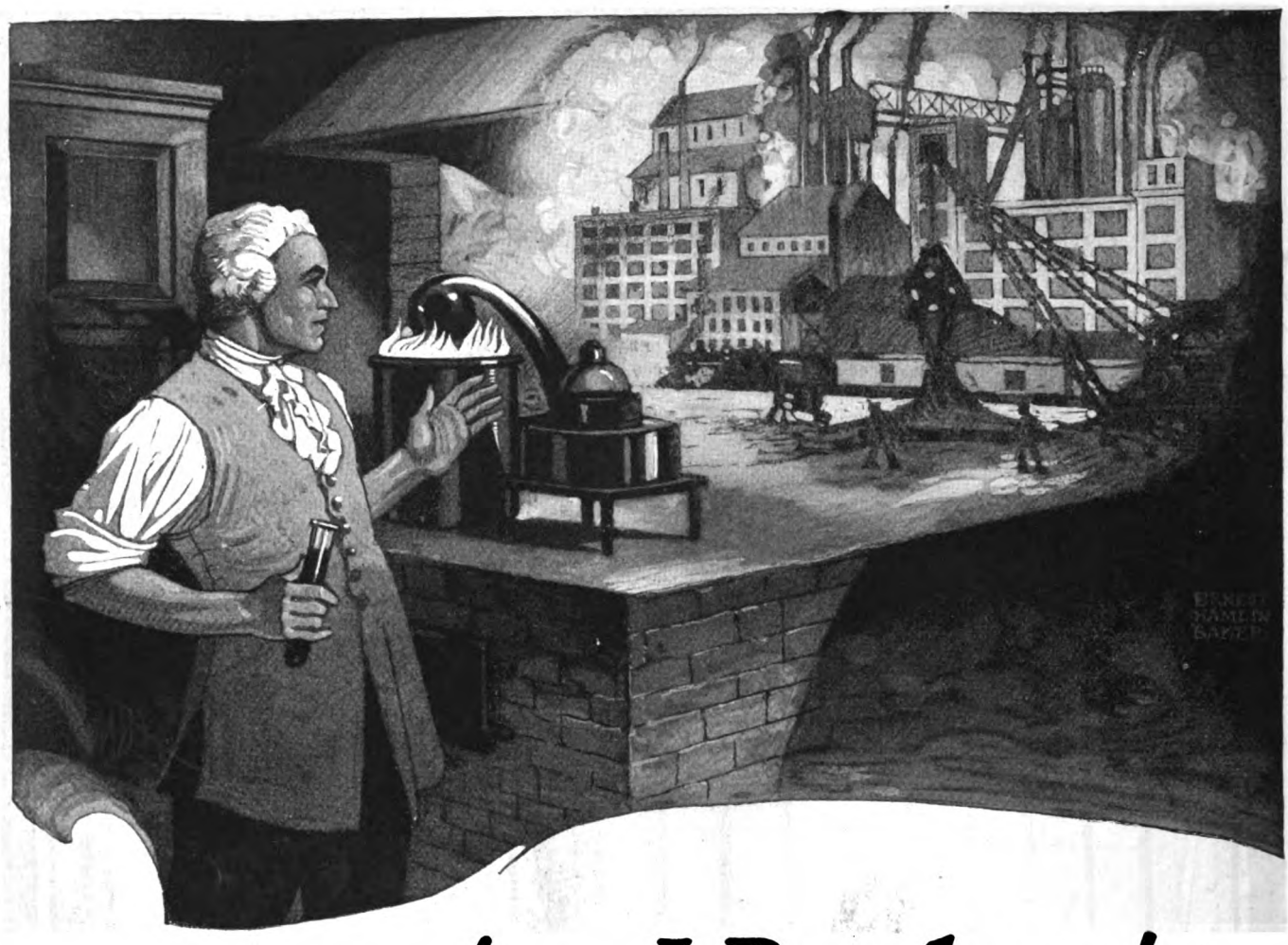
Atlanta	Jersey City, N. J
Bethlehem, Pa.	Johnstown, Pa.
Boston	Madison, Ill.
Buffalo	**Minneapolis**
Chicago	**New York**
Cleveland	**Oklahoma City**
Coatesville, Pa.	**Philadelphia**
Defiance, O.	**Pittsburgh**
Detroit	**Richmond**
Emeryville, Cal.	**Seattle**
Gloucester, N. J.	**St. Louis**
Warren, O.	

Airco warehouses at intermediate points

Bold type indicates the city also contains an Airco District Office. Address correspondence to nearest District Office.

Send for Airco Booklet "The Technical Engineer's Judgment of the Oxyacetylene Process." Mention MARINE REVIEW when writing.

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



γεννάω–I Produce!

ONE hundred and forty-four years ago Lavoisier coined the name *Oxygen.*

In choosing the Greek word Γεννάω "I produce," as his main root he had in mind a chemical reaction commonly associated with the gas.

Had Lavoisier been able to foresee the tremendous part that Linde Oxygen is playing in modern industrial development, he would have realized the vast significance of that word Γεννάω "I produce!"

The country over, Linde Oxygen is daily making possible greater production—everywhere it is saving time and cutting costs.

A chain of seventy-five Linde plants and warehouses assures American welders and cutters of a prompt supply of highly pure oxygen—wherever they are, whatever their requirements.

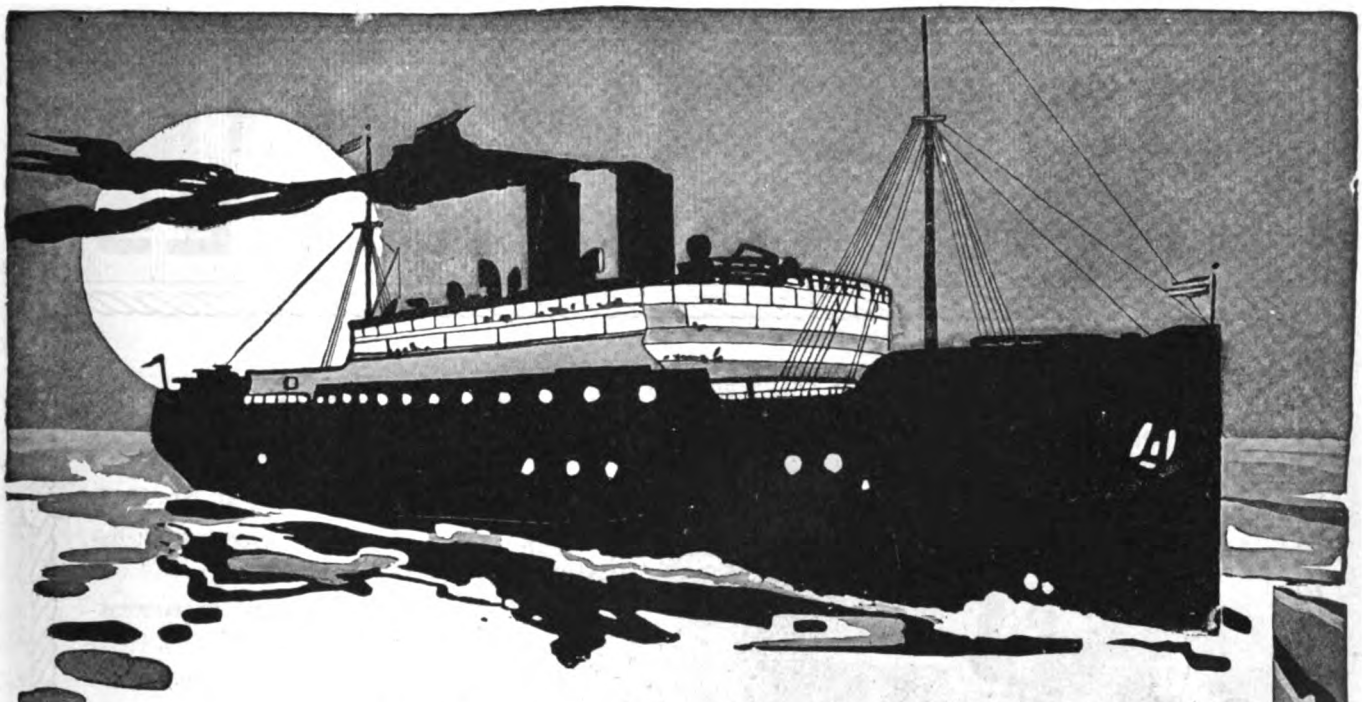
THE LINDE AIR PRODUCTS COMPANY

Carbide and Carbon Building, 30 East 42nd Street, N. Y.
Balfour Building, San Francisco

The Largest Producer of Oxygen in the World

L-502-21

Generated on 2024-08-28 00:08 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



NEW YORK—CLEVELAND—LONDON

Marine Review

THE BUSINESS OF TRANSPORTATION BY WATER

Vol. 51 DECEMBER, 1921 No. 12

Published by The Penton Publishing Co., Cleveland, Ohio, U. S. A.

IN THIS ISSUE

	Page		Page
Exhibits Show U. S. Marine Power	523	Editorial	548
U. S. Classification Bureau Grows	531	Late Decisions in Maritime Law	550
Europe's Great Inland Waterway	535	U. S. Shipyard Slump Is Magnified	551
What the British Are Doing	537	What Pacific Shipyards Are Doing	553
Assigned Shipping Board Vessels	539	Late Flashes on Marine Disasters	555
Marine News in a Personal Way	540	Marine Business Statistics Condensed	556
Fruit Ship Propelled by Electricity	541	Activities in the Marine Field	559
World's Charter Market	542	Practical Ideas for the Engineer	564
Ocean Freight Rates	545	Equipment Used Afloat, Ashore	566
Photographs from Far and Near	546	Business News for the Marine Trade	567

BRANCH OFFICES

BOSTON	426 Old South Bldg.	NEW YORK	220 Broadway
CHICAGO	1147 People's Gas Bldg.	PITTSBURGH	2148-49 Oliver Bldg.
CINCINNATI	501-505 Commercial Tribune Bldg.	SAN FRANCISCO	8 Monadnock Bldg.
HARTFORD	P. O. Box 1231	WASHINGTON	40 Metzerott Bldg.

FOREIGN OFFICES

PARIS, FRANCE 224 Rue de Rivoli LONDON, ENG., 2-3 Caxton House, Westminster, S. W. 1.
BIRMINGHAM, ENG. - Prince's Chambers

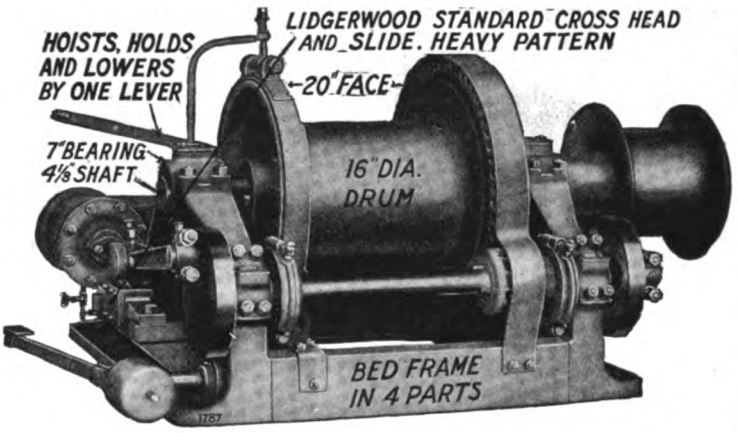
Cable Address IROTRAPEN, London

Subscription, United States and its possessions, $3 per year; Canada and other Foreign Countries, $4 per year. Single copies 25 cents. Back numbers over three months 50 cents. The Cleveland News Co. will supply the trade with MARINE REVIEW through the regular channels of the American News Co. European Agent, The International News Co., Breams building, Chancery Lane, London, E. C., England.

Member, the Audit Bureau of Circulations and Associated Business Papers, Inc.
Entered at the Post Office at Cleveland, Ohio, as Second Class Matter, under the act of March 3, 1879
Copyright 1921 by The Penton Publishing Co.

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

LIDGERWOOD
STANDARD WINCHES


HOISTS, HOLDS AND LOWERS BY ONE LEVER
LIDGERWOOD STANDARD CROSS HEAD AND SLIDE. HEAVY PATTERN
20" FACE
7" BEARING 4⅛ SHAFT
16" DIA. DRUM
BED FRAME IN 4 PARTS

Steam Winches

Illustration shows Cat. No. 1917.

The standard reverse valve type ship's winch.

Over 6,000 built and in successful use.

All parts interchangeable.

One man operates two winches.

Gives absolute control of load both in hoisting and LOWERING.

SHIP AND DOCK WINCHES—TOWING ENGINES —STEERING ENGINES

Send for Catalog MARINE MACHINERY

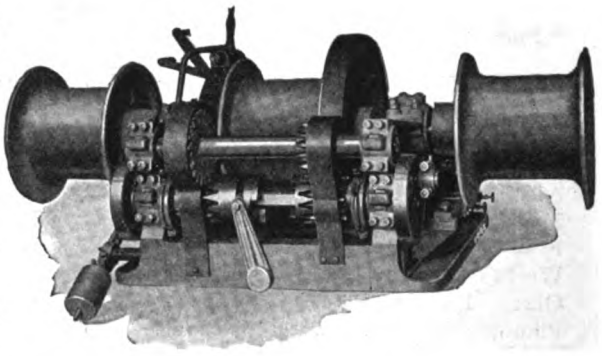
Two Speed Winches

This illustration shows the Lidgerwood winch, Cat. No. 1917—C.

It has compound gearing, handling light loads at high speed and heavy loads at slower speed.

Has same simple and perfect control as the single gear No. 1917.

Interchangeable on same bed, and pipe connections with the No. 1917.



We build a complete line of electric and oil driven cargo winches. Standard winches in stock for immediate shipment.

BRANCHES: Chicago Cleveland Detroit Pittsburgh Philadelphia Seattle Los Angeles London, England

LIDGERWOOD
MFG. CO., 96 LIBERTY ST., NEW YORK, N.Y.

Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Where Strength means Safety

When a man buys Whitlock Manila Rope he purchases more than simply first-class cordage—he buys protection, safety insurance for his life and property. And he gets it. For Whitlock Rope stands up manfully under the hardest work.

WHITLOCK CORDAGE
THE UTMOST IN ROPE VALUE

By its superior service, Whitlock Rope creates a great goodwill in favor of the dealer who supplies it. And, fortunately for the user of rope, even the first cost of Whitlock is less, for it has greater length per pound. Naturally, progressive dealers throughout the country are building business with Whitlock Guaranteed Cordage.

Whitlock Manila is the rope that is guaranteed superior to U. S. Government Specifications not only in strength and length per pound, but also in *quality of fiber*.

If you are a user of rope, Whitlock can save you money; if you are a dealer, it can make more money for you.

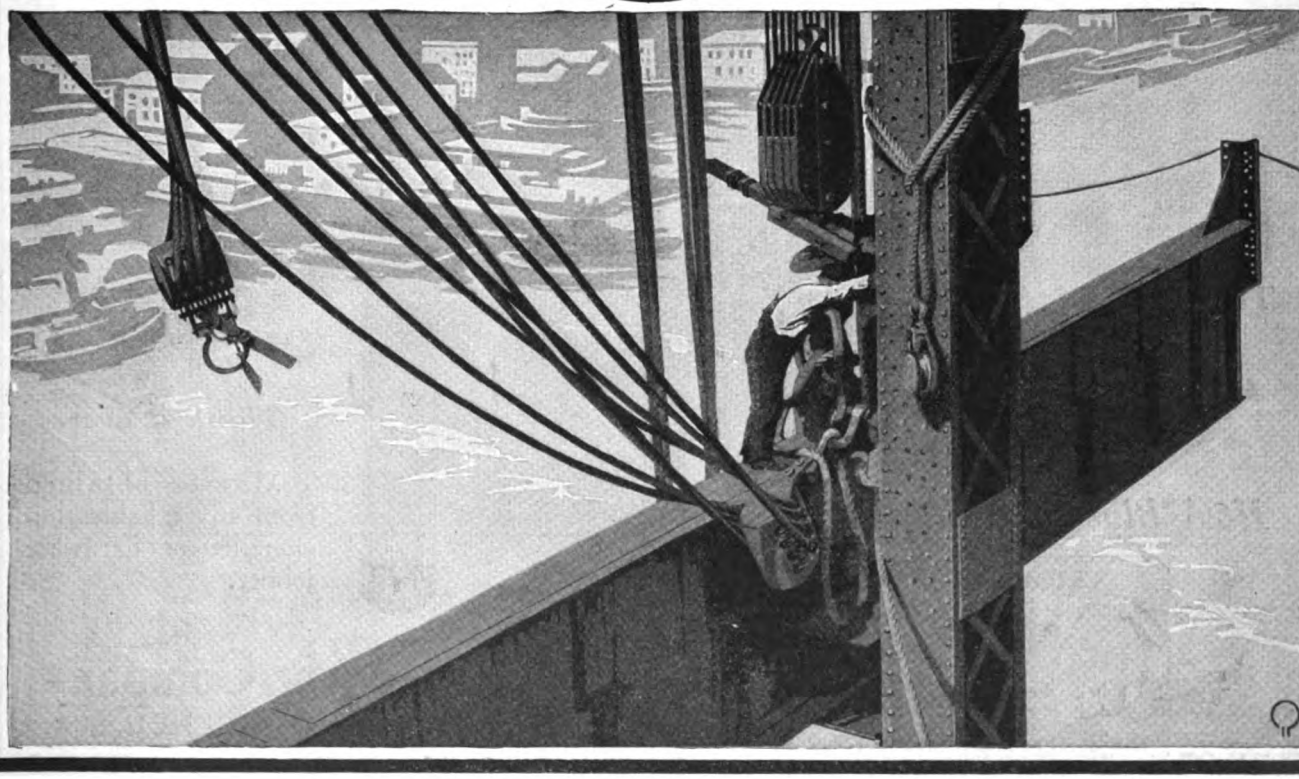
Write today for our 1921 Catalog which tells the complete story of Whitlock Manila and Sisal products. And ask for the Whitlock distributor or dealer in your vicinity.

WHITLOCK CORDAGE COMPANY
46 South Street, New York

Factory and Warehouses
Jersey City
N. J.

WHITLOCK The Utmost in Rope Value MANILA

Branches
Chicago, Boston, Kansas City
and Houston



Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

On a ship—three things a rope must deliver

Three things you should get when you buy rope. The first is strength.

H. & A. "Blue Heart" Manila Rope is guaranteed to *exceed* the Government specifications for strength—stronger than the requirements of the U. S. Shipping Board for equipping all its vessels.

You pay, secondly, for wear and resistance to weather. H. & A. "Blue Heart" Manila Rope is spun from special quality pure manila fibre carefully selected by our own experts. It is properly lubricated but not overloaded with oil and grease. It delivers exceptional wear and resistance to weather.

Thirdly, you should get a rope that is easy to work with. The lay of H. & A. "Blue Heart" Manila Rope makes it very pliable even in very large sizes—a feature particularly desirable in splicing.

A "Blue Heart" runs through every H. & A. "Blue Heart" Manila Rope. When you buy, untwist the strands and look for this guarantee of excess strength, pure manila fibre, long wear and resistance to weather.

We also make best marine oakum—our well-known "Mayflower" brand—and a full line of tarred fittings consisting of marline, ratline, houseline, hambroline, and spun yarn.

The Hooven & Allison Company
"Spinners of Fine Cordage since 1869"
Xenia, Ohio

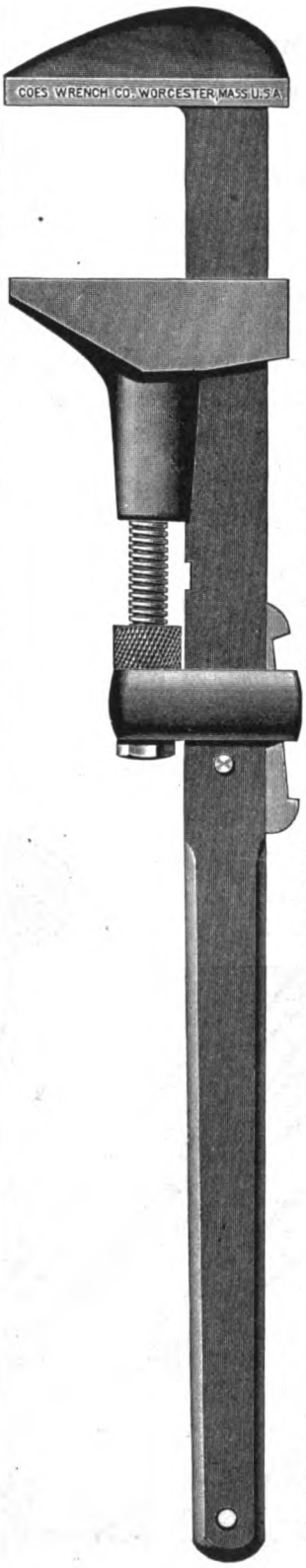
H&A

H&A "Blue Heart" Manila Rope

© 1921, The Hooven & Allison Co.

"GENUINE"

Coes KEY-MODEL Wrench



Without a Rival

The COES KEY-MODEL WRENCH has no counterpart in the hardware field.

It handles work which heretofore has called for expensive, heavy, unwieldy, solid wrenches, and handles the work with less exertion.

Made in three stock sizes of 28", 36" and 48", with a special made-to-order size of 72".

The cost is less than that of a set of forged solid wrenches and the range of application is many times greater. They are the logical engine-room tool for heavy work.

Why overlook a good bet?

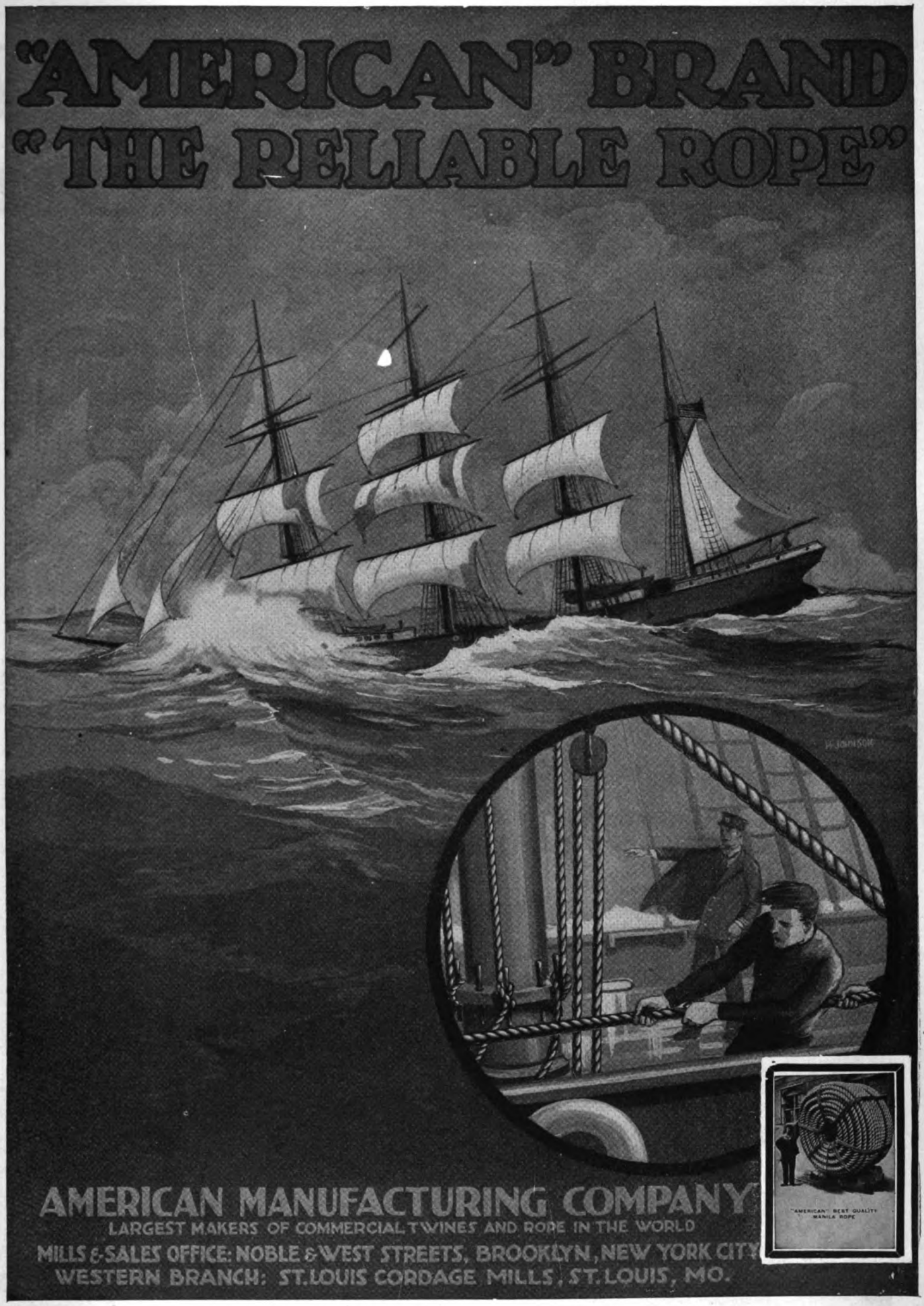
28" model opens from zero to 5⅛"
36" model opens from zero to 6¼"
48" model opens from zero to 9½"
72" model opens from zero to 12¼"

Think it over.

May be obtained from any reliable ship chandler or hardware jobber.

Coes Wrench Company
WORCESTER, MASSACHUSETTS, U. S. A.

Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

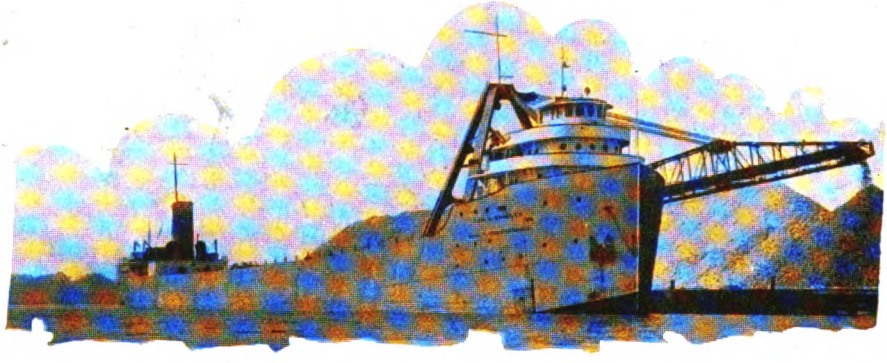

"AMERICAN" BRAND
"THE RELIABLE ROPE"
AMERICAN MANUFACTURING COMPANY
LARGEST MAKERS OF COMMERCIAL TWINES AND ROPE IN THE WORLD
MILLS & SALES OFFICE: NOBLE & WEST STREETS, BROOKLYN, NEW YORK CITY
WESTERN BRANCH: ST. LOUIS CORDAGE MILLS, ST. LOUIS, MO.
"AMERICAN" BEST QUALITY MANILA ROPE

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

The American Com

Bulk Freighter
"H. H. PORTER"



Self Unloading Bulk Freighter
"CARL D. BRADLEY"

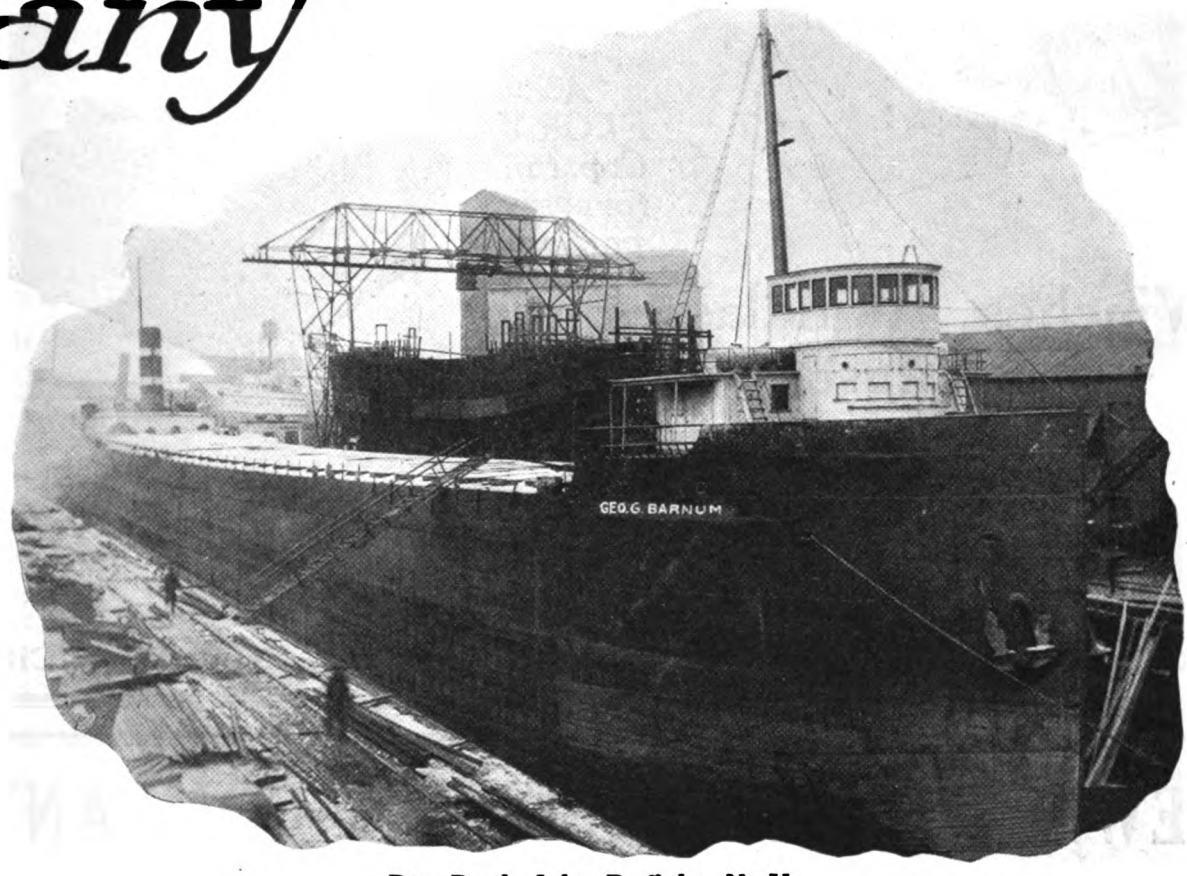
Oil Tanker
"W. P. COWAN"

These illustrations represent three of the different types of Lake Cargo Freighters which have been built by this Company in the past few years.

CONSTRUCTION PLANTS
AT
DETROIT, MICH.
WYANDOTTE, MICH.
CLEVELAND, OHIO
LORAIN, OHIO

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Ship Building pany



Dry Dock Job—Buffalo, N. Y.

OUR REPAIR FACILITIES

13 MODERN DRY DOCKS — Four located at Buffalo, Chicago, Lorain, and Superior, capable of docking 600 foot type ships.

MOST MODERN EQUIPMENT for repairing, re-conditioning and reconstruction of ships always at your service.

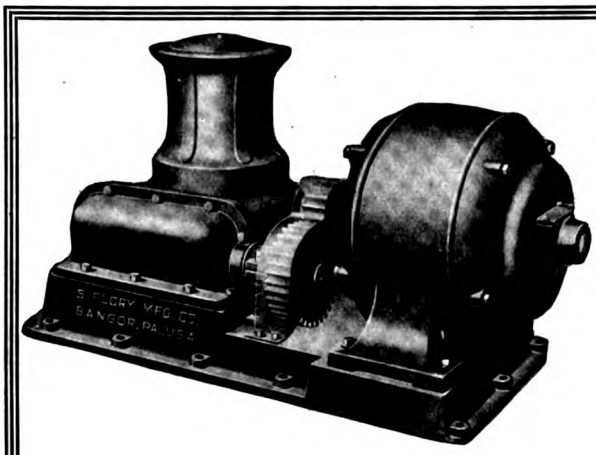
REPAIR SCOW SERVICE AT ALL TERMINAL PLANTS— This feature makes it unnecessary to move vessels to our yards for minor repairs which can be made while ship is being loaded or unloaded. Scows are equipped with large Air Compressors, Electric and Acetylene Welding Apparatus. Scows at our Superior, Cleveland and Buffalo plants are equipped with 10-ton Steam Derricks in addition to above equipment.

Repair plants at

Cleveland, O.	**Lorain, O.**	**Detroit, Mich.**	**Buffalo, N. Y.**
Chicago, Ill.	**Wyandotte, Mich.**	**Milwaukee, Wis.**	**Superior, Wis.**

General Office, Foot of W. 54th St., Cleveland, Ohio

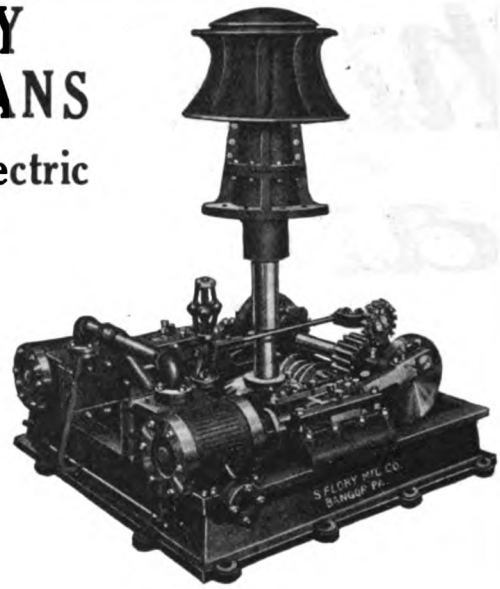
Generated on 2024-08-28 00:03 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



FLORY CAPSTANS

Steam—Electric Hand

A FLORY Capstan for every purpose



Winches—Windlasses—Capstans Hoists—Cableways

Send for New Capstan Catalogue No. 33

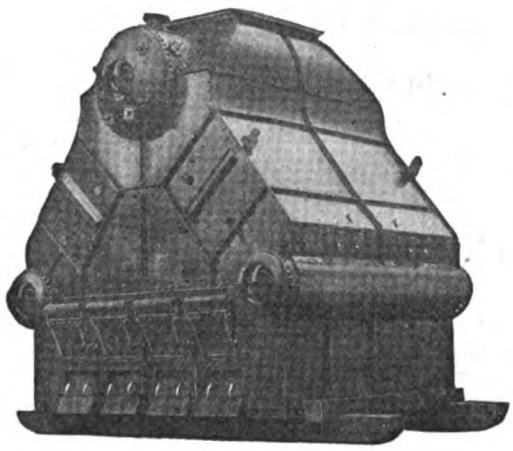
S. FLORY MFG. CO.

Bangor, Penna.

95 Liberty Street **New York City**

NEW YORK ENGINEERING COMPANY

The Ludlum Water Tube Marine Boiler



THE NEW MARINE STANDARD

The Ludlum Boiler has the greatest capacity and occupies less space than any other marine boiler. This fact alone may solve your boiler problem.

In addition to unequalled compactness, the Ludlum Boiler is economical—a quick steamer—its large combustion chamber is suitable for burning coal, oil or wood equally as well. It embodies all other special features demanded by modern marine practice.

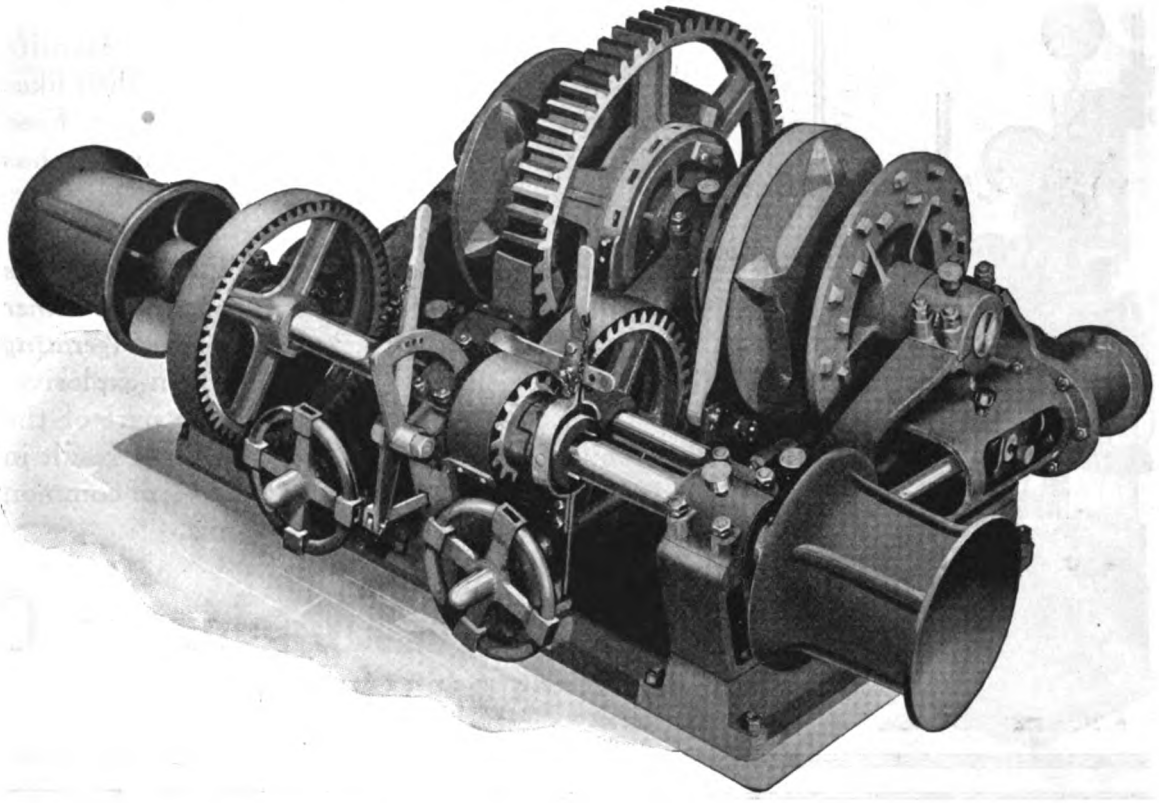
Our Engineering Department is at your service in solving your boiler problems. Catalogue on request.

NEW YORK ENGINEERING COMPANY

Office: 2 Rector St., New York City **Works: Yonkers, N. Y.**

Generated on 2024-08-27 23:53 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

The "Superior" Spur Geared Windlass



When in the market for a well designed, well built, and reliable Spur Geared Windlass—either steam or electric—write us for full information.

We Also Build

Windlasses
Steering Gears
Capstans
Gypseys
Winches
Hoisting Engines
Swinging Engines

Designers and Builders of

"Superior"

Engines and Machinery

Just tell us you are interested

We Also Build

Power Pawl Posts
Dredge Deck Engines
Anchor Hoists
Scow Winding Gears
Drill Frame Hoists
Suction Pipe Hoists
Steel and Wooden Derricks

Superior Iron Works Company

SUPERIOR, WISCONSIN

Generated on 2024-08-27 23:52 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Marine Refrigeration

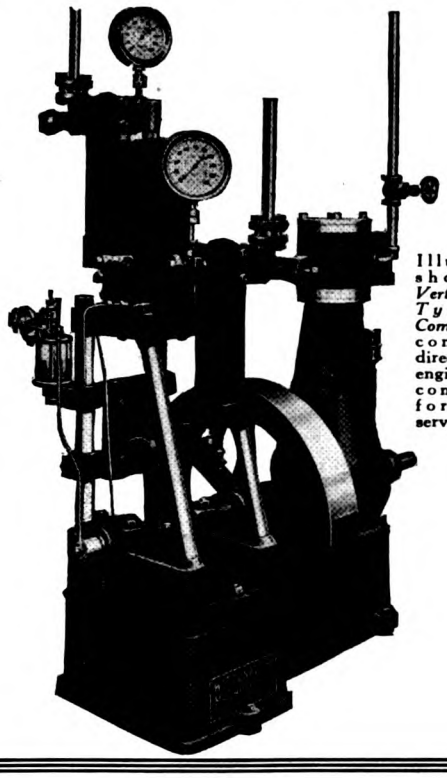


Illustration shows our *Vertical Marine Type CO2 Compressor*, for connecting direct to steam engine. A very compact unit for marine service.

This open type compressor is a favorite with Marine Engineers. Knowing their likes and dislikes by personal contact, Fred Wittenmeier designed this machine; it has proved a remarkable success.

The Carbonic Anhydride (CO2) System has many advantages over Ammonia or other systems using dangerous gases as refrigerating mediums. CO2 is safe and non-explosive, and a possible mistake on the part of the operator or a break in pipe cannot result in loss of life and property which is of common occurrence with other systems.

Wittenmeier Machinery Co.

Refrigerating Apparatus

CHICAGO, U. S. A.

Morison Suspension Boiler Furnaces

For Land and Marine Boilers

Uniform Thickness **Easily Cleaned** **Unexcelled for Strength**

Also FOX CORRUGATED FURNACES

Made to United States, American Bureau of Shipping, Lloyds, Bureau Veritas, or any other requirements.

MANUFACTURED BY

THE CONTINENTAL IRON WORKS

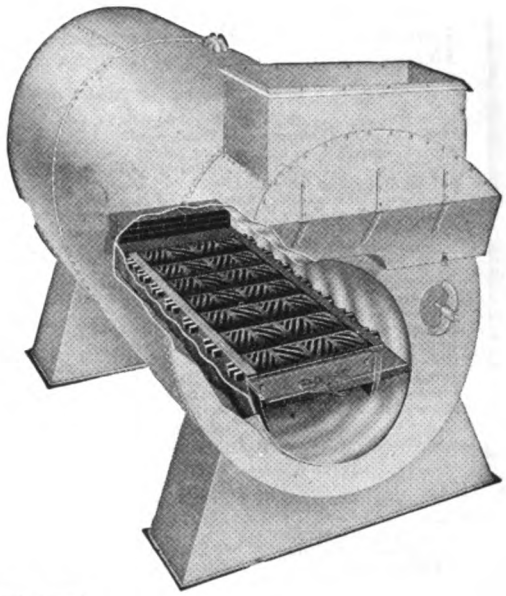
West and Calyer Sts., BOROUGH OF BROOKLYN, N. Y.

ESTABLISHED 1859 Greenpoint Ferry from East 23rd Street, New York INCORPORATED 1887

Generated on 2024-08-27 23:54 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Many ship owners permit the use of antiquated equipment and obsolete firing methods on their boats — Improved equipment and scientific methods would save them thousands of dollars.

Investigate THOMAS' methods and



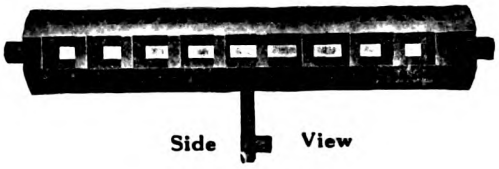
Thomas

W-S-D

Wiggling--Shaking--Dumping

GRATE BARS

Bottom and End View of Bar Showing Structure



Side View

The Elliptic shape and Eccentric movement of the bar is different from all other bars. Keeps your fires at a high state of efficiency. Eliminates the formation of so much clinker, giving clean fires, which make them save their entire cost on an average of 60 days, and when they finish paying for themselves, keep saving, paying for the privilege of working for you. *When you fail to use them, you pay the coal man for them in excess fuel bills.*

For Use With Either Natural, Induced or Forced Draft

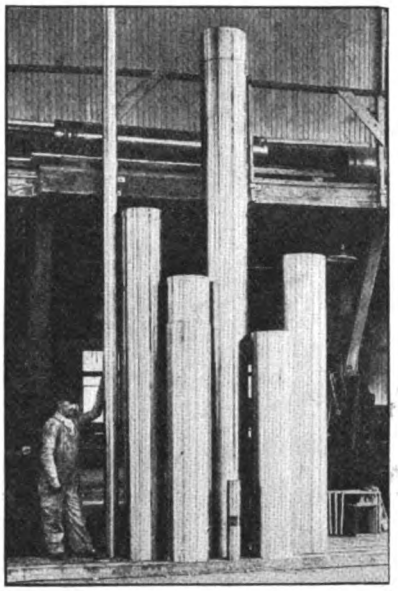
For Detailed Information Write

THOMAS GRATE BAR CO., Birmingham, Ala.

Sales Offices:

Hippodrome Building, Cleveland, Ohio
2 Rector St., New York
Railway Exchange Building, Chicago, Ill.
315 Board of Trade Bldg., New Orleans, La.

Generated on 2024-08-28 00:07 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



DON'T EXPERIMENT!

Leading Ship Yards Use Our Fluid Compressed Sleeves Ready For Shrinking On—No Patterns Required—Furnished On Short Notice—Machined To Size Wanted—No Splicing—No Jointing—Lengths Up To 20 Feet—Diameters 3" To 46"

Some Users of Our Fluid-Compressed Seamless Tubes for Propeller Shaft Sleeves, Pump and Press Liners and Roll Covers.

SHIP AND MARINE ENGINE BUILDERS

U. S. Navy.....Washington, D. C.
U. S. Ordnance Department, Washington, D.C.
Wm. Cramp & Sons Ship & Eng. Bldg. Co. .....Philadelphia, Pa.
Sun Shipbuilding Co.....Chester, Pa.
Merchants Shipbuilding Corp'n .Bristol, Pa.
Mesta Machine Co.....Pittsburgh, Pa.
Reading Iron Co.....Reading, Pa.
Federal Shipbuilding Co.....Kearny, N. J.
N. Y. Shipbuilding Corp'n.....Camden, N. J.
Westinghouse Electric Co'...Bloomfield, N. J.
Tietjen & Lang Dry Dock Co..Hoboken, N. J.
W. & A. Fletcher Co.....Hoboken, N. J.
Submarine Boat Corp'n .....Newark, N. J.
Morse Dry Dock & Repair Co.Brooklyn, N. Y.
Robins Dry Dock & Repair Co.Brooklyn, N. Y.
James Shewan & Sons.....Brooklyn, N. Y.
Standard Shipbuilding Co.Staten Island, N. Y.
Staten Island Shipbuilding Co. .....Staten Island, N. Y.
H. G. Trout Co .....Buffalo, N. Y.
Baltimore Dry Dock.....Baltimore, Md.
Newport News Shipbuilding & Dry Dock .....Newport News, Va.
Hardie-Tynes Mfg. Co.....Birmingham, Ala.
Alabama Dry Dock.....Mobile, Ala.
Chickasaw Shipbuilding Co.....Mobile, Ala.
Sinclair Navigation Co.....New Orleans, La.
Jahncke Dry Dock & Ship Repair Co. .....New Orleans, La.
Johnson Iron Works.....New Orleans, La.
American Bridge Co. .....Chicago, Ill.
Toledo Shipbuilding Co. .....Toledo, Ohio
American Shipbuilding Co....Cleveland, Ohio
Allis-Chalmers Mfg. Co .....Milwaukee, Wis.
Llewellyn Iron Works.....Los Angeles, Calif.
Bath Iron Works.....Bath, Me.
Canadian General Electric Co..Montreal, Que.
Collingwood Shipbuilding Co.Collingwood, Ont.
Tidewater Shipbuilders, Ltd...Montreal, Que.

MANUFACTURERS OF PUMPS, PRESSES AND ROLLS AND MISCELLANEOUS MATERIAL USING FLUID-COMPRESSED TUBES

Worthington Pump & Mach. Corp'n .....E. Cambridge, Mass.
Worthington Pump & Mach. Corp'n .....Holyoke, Mass.
Rice, Barton & Fales Mach. & Iron Co. .....Worcester, Mass.
J. H. Horne & Sons.....Lawrence, Mass.
Union Machine Co.....Fitchburg, Mass.
Arlington Machine Works ..Arlington, Mass.
Textile Finishing Mach. Co..Providence, R. I.
U. T. Hungerford Brass & Copper Co. .....New York
Sandy Hill Iron & Brass Works .....Hudson Falls, N. Y.
The Bagley & Sewall Co....Watertown, N. Y.
Bausch & Lomb Optical Co..Rochester, N. Y.
Eastman Kodak Co.....Rochester, N. Y.
Downingtown Mfg. Co..E. Downingtown, Pa.
Pittsburgh Valve, Fdy. & Construction Co. .....Pittsburgh, Pa.
Keystone Driller Co .....Beaver Falls, Pa.
Midvale Steel & Ordnance Co.Philadelphia, Pa.
The Moore & White Co.....Philadelphia, Pa.
H. W. Butterworth & Sons Co.Philadelphia, Pa.
E. I. DuPont de Nemours & Co. .....Wilmington, Del.
Pusey & Jones.....Wilmington, Del.
Fairbanks-Morse & Co.....Chicago
Charles H. Belsey & Co.....Chicago
International Harvester Co.....Chicago
National Biscuit Co.....Marseilles, Ill.
Black-Clawson Co.....Hamilton, Ohio
Shartle Bros.....Middletown, Ohio
The Deming Co.....Salem, Ohio
Hydraulic Press Mfg. Co ..Mt. Gilead, Ohio
U. S. Gypsum Co.....Gypsum, Ohio
Cream Production Co. .....Pt. Huron, Mich.
Beloit Iron Works.....Beloit, Wis.
R. D. Cole Mfg. Co.....Newnan, Ga.

THE SANDUSKY FOUNDRY & MACHINE CO., SANDUSKY, OHIO

BARGAINS IN DIESEL ENGINES

In order to move our present stock of engines we are prepared to make a substantial reduction from our regular price. For early delivery.

The Diesel-Electric Driven Beam Trawler "MARINER"

Due to the Successful performance of the Trawler "Mariner," we are now engaged in the installation of the *Diesel-Electric Drive* for vessels of large carrying capacity.

Sizes 120 B.H.P. and upwards.

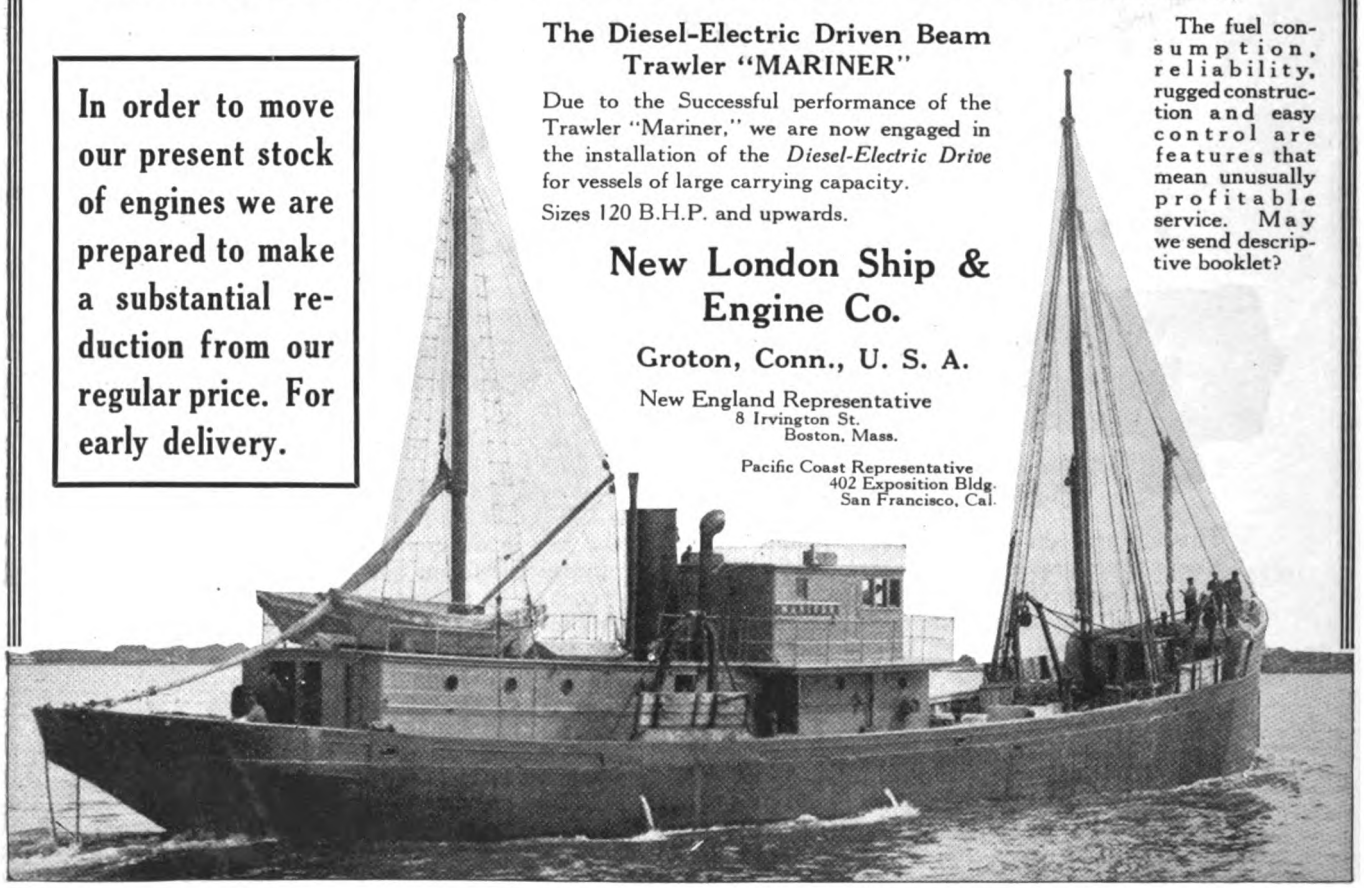
The fuel consumption, reliability, rugged construction and easy control are features that mean unusually profitable service. May we send descriptive booklet?

New London Ship & Engine Co.

Groton, Conn., U. S. A.

New England Representative
8 Irvington St.
Boston, Mass.

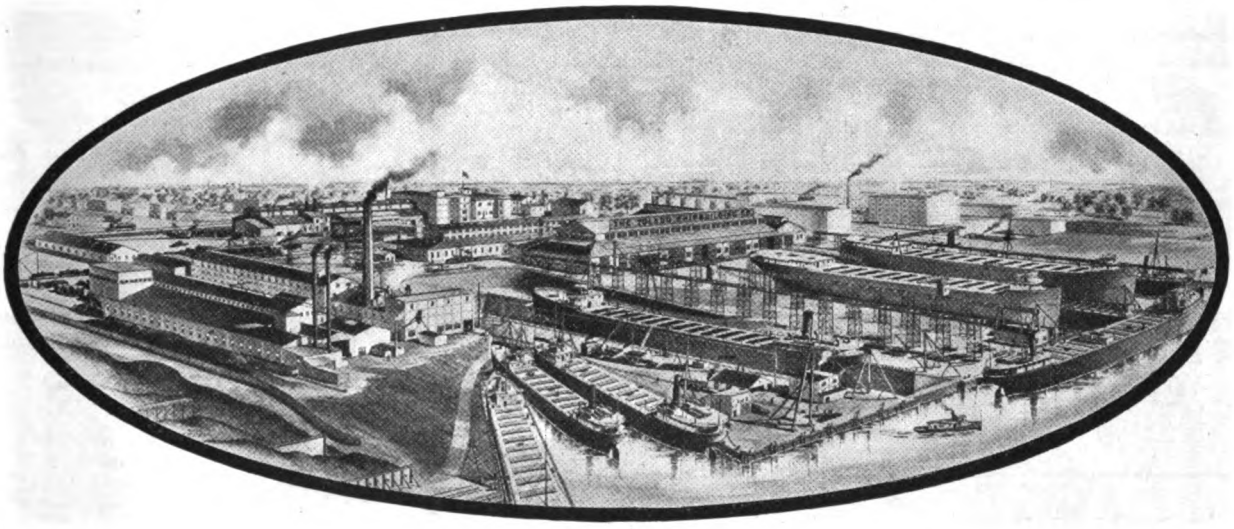
Pacific Coast Representative
402 Exposition Bldg.
San Francisco, Cal.



Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

The Toledo Shipbuilding Company

TOLEDO - - - OHIO



Builders and Repairers *of* Ships and Engines

H. S. WILKINSON
President and Treasurer

A. D. BLACK, Assistant to President
Secretary and Assistant Treasurer

W. G. HENDERSON,
Vice President and General Superintendent

EDWARD HOPKINS,
Vice President and Naval Architect

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

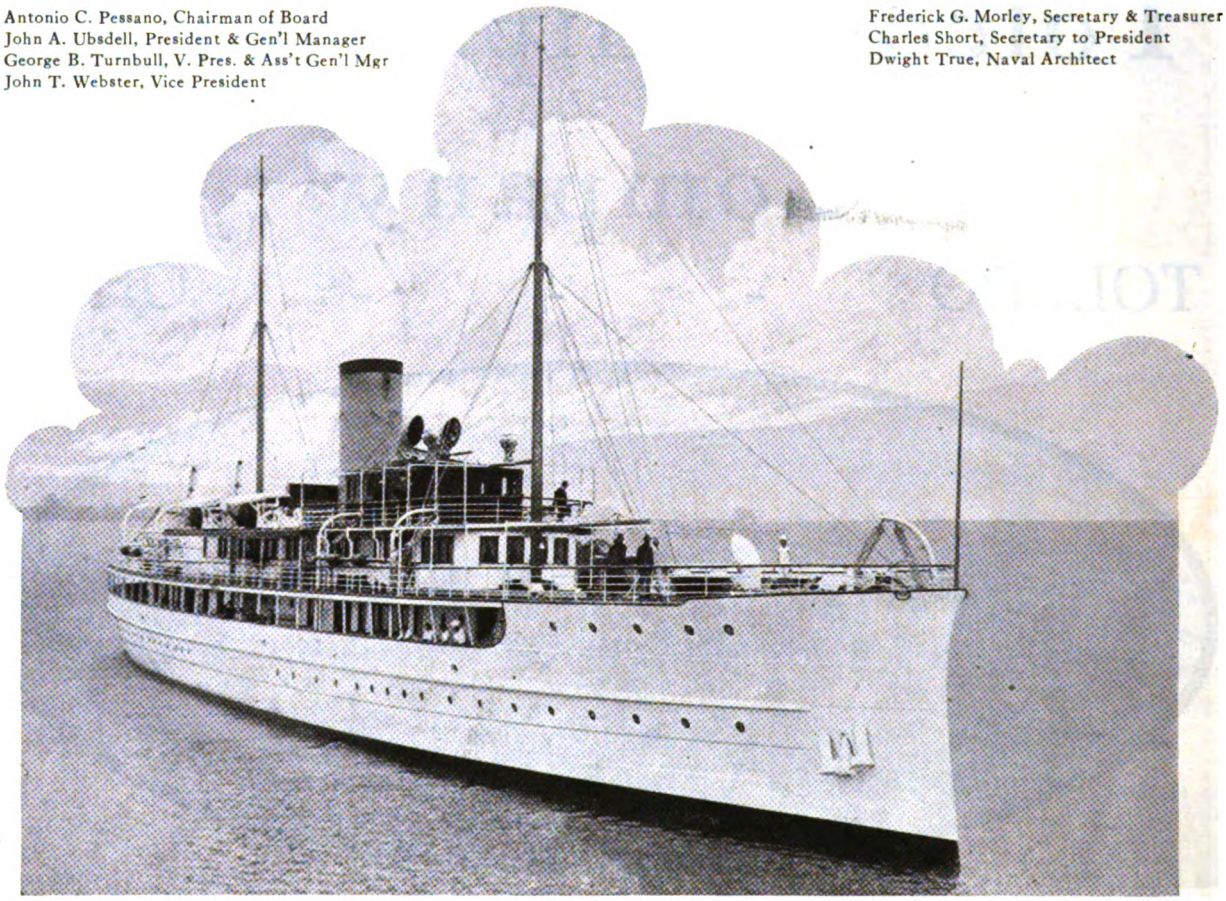
Digitized by Google

Original from NEW YORK PUBLIC LIBRARY

Great Lakes Engineering Works

Antonio C. Pessano, Chairman of Board
John A. Ubsdell, President & Gen'l Manager
George B. Turnbull, V. Pres. & Ass't Gen'l Mgr
John T. Webster, Vice President

Frederick G. Morley, Secretary & Treasurer
Charles Short, Secretary to President
Dwight True, Naval Architect



Builders of the Largest Seagoing Yacht, "Delphine"

General Offices: River Rouge, Michigan

New York Office, 5 Nassau St.

Cleveland Office, Kirby Bldg.

Shipyard, Dry Docks
and Repair Plant
River Rouge, Michigan

Shipyard, Dry Dock,
Engine Building and
Repair Plant
Ashtabula, Ohio

Engine and Repair Plant
Detroit, Michigan

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Annual Marine Exposition

Marine Equipment Association of America

Central Mercantile Bldg.
45 West 18th St., New York City
Week of November 14, 1921

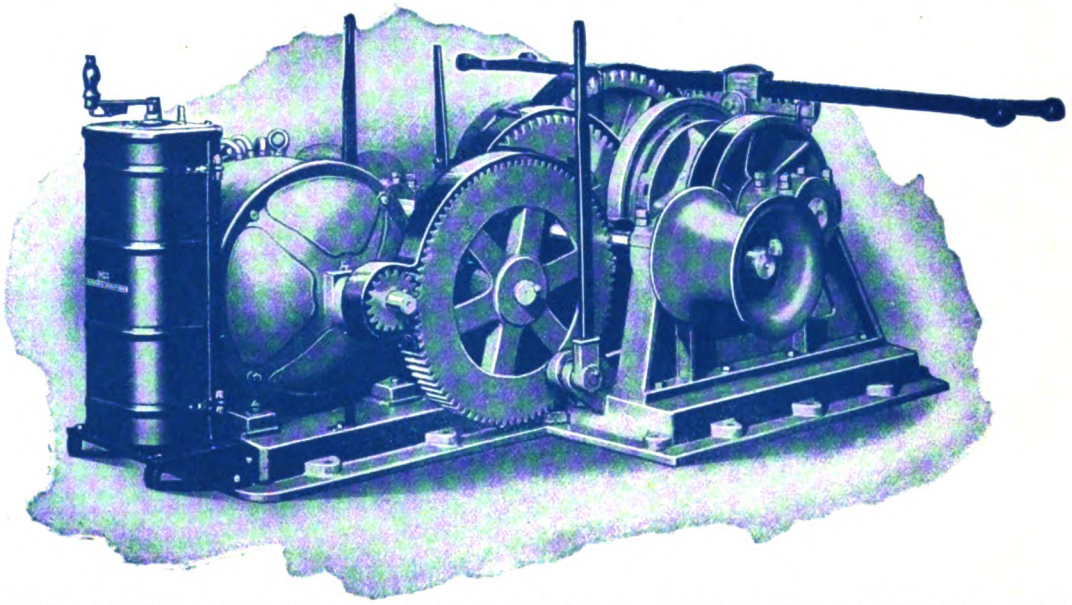
Society of Naval Architects and Marine Engineers
American Society of Marine Draftsmen

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

MUNDY

ESTABLISHED 1869

HOISTS · DERRICKS · CABLEWAYS · MARINE AUXILIARIES



THE MUNDY ELECTRIC SPUR GEARED WINDLASS

Convincing points: Triple Reduction Spur Gear assures powerful pull. Wildcats are controlled by powerful compressor brakes operated by hand levers, and are fitted with our locking device. Intermediate shaft is fitted with gypsy heads which run at about five times speed of main shaft—of great service in handling lines.

May we send you complete Marine Catalog?

We manufacture Steam and Electric

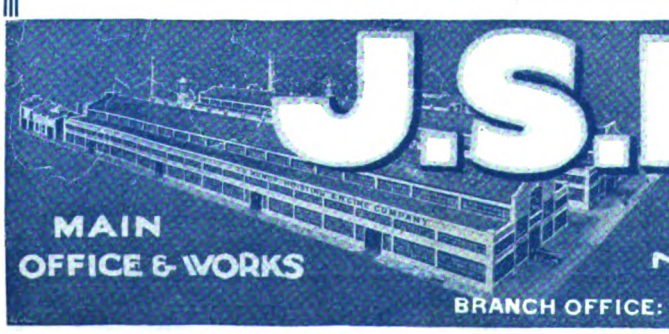
STEERING ENGINES	WINDLASSES
CAPSTANS	CARGO WINCHES
HYDRAULIC TELEMOTORS	ASH HOISTS

See our Exhibit at

The Annual Marine Exposition

Central Mercantile Bldg., 45 W. 18th St., New York City

Week of November 14, 1921.



J.S.MUNDY

HOISTING ENGINE COMPANY

MAIN OFFICE & WORKS

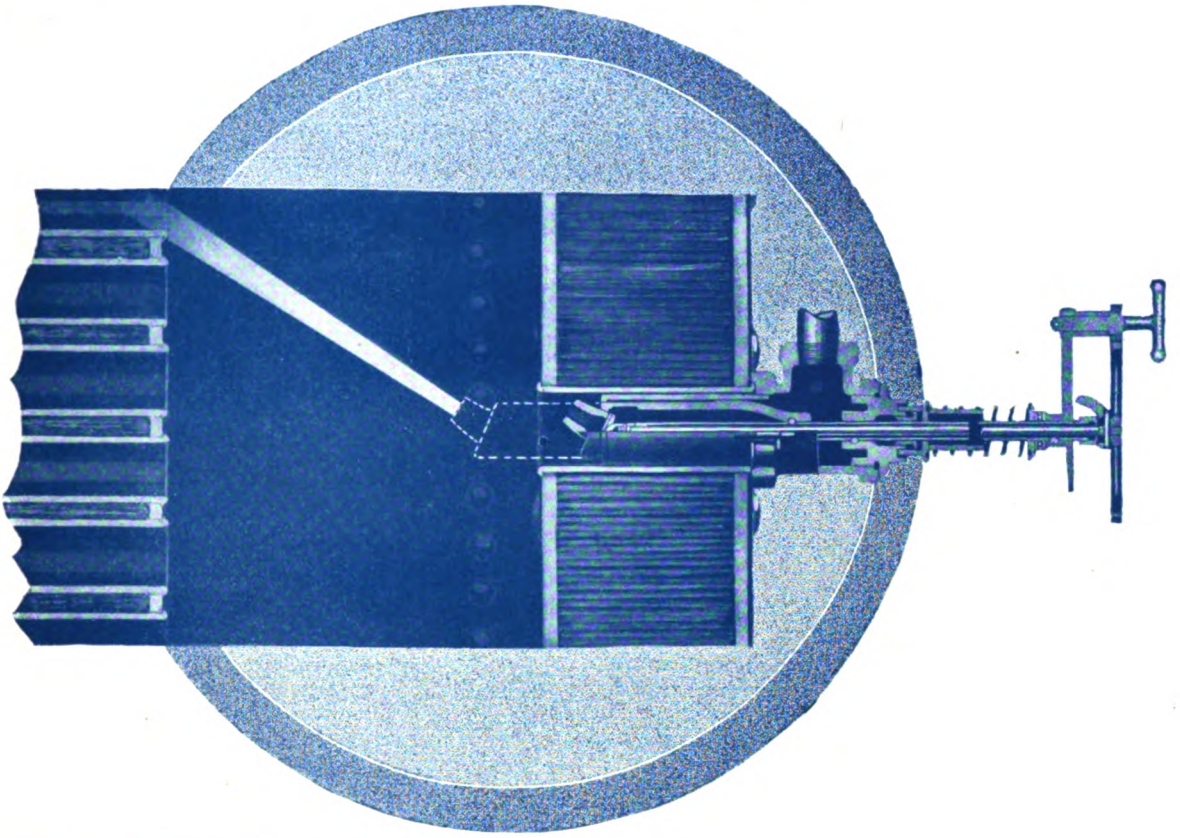
NEWARK, NEW JERSEY, U.S.A.

BRANCH OFFICE: NEW YORK CITY

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from NEW YORK PUBLIC LIBRARY



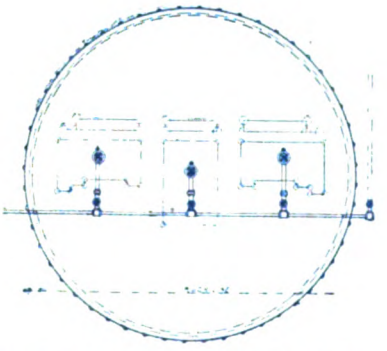
SOOT REMOVAL FROM SCOTCH MARINE BOILERS

Soot Removal From Scotch Marine Boilers is effectively accomplished by the improved Diamond Rear End Blower. (Model B).

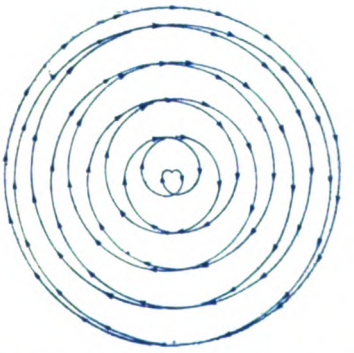
And soot removal is essential to economy. Power is one of the largest items of expense in the cost of operating a vessel, and the cost of fuel represents on the average 70 percent of the cost of power. The presence of soot has cost — it still costs — a loss of hundreds of thousands of tons of coal and hundreds of thousands of barrels of fuel oil a year to ship owners. Soot waste has been eliminated on many ships, and it can be eliminated on all with a consequent notable increase in boiler efficiency and a consequent great increase in marine profits.

Thousands of Diamond Model B Blowers are in use today on Scotch Marine boilers. The blower is permanently installed through the rear water leg, a hole being cut in the plates and a section of tubing expanded and beaded into place. The blower is encased in this tubing. When not in use the blower is secreted in the casing. As the steam is turned on the nozzle is automatically forced forward into blowing position. In operation dry steam is shot into each tube with the draft at a terrific velocity, sweeping and scouring the soot from the full length of the tubes.

Diamond Soot Blowers save fuel and labor. Write for full information on blowers for any type of boiler, requesting your copy of Bulletin 144, "How Some Ship Owners Have Increased Their Profits."



Method of installing Model B blowers on a three furnace Scotch boiler.



The arrows show the course of the steam jet as it travels over the tube sheet, blowing every tube.

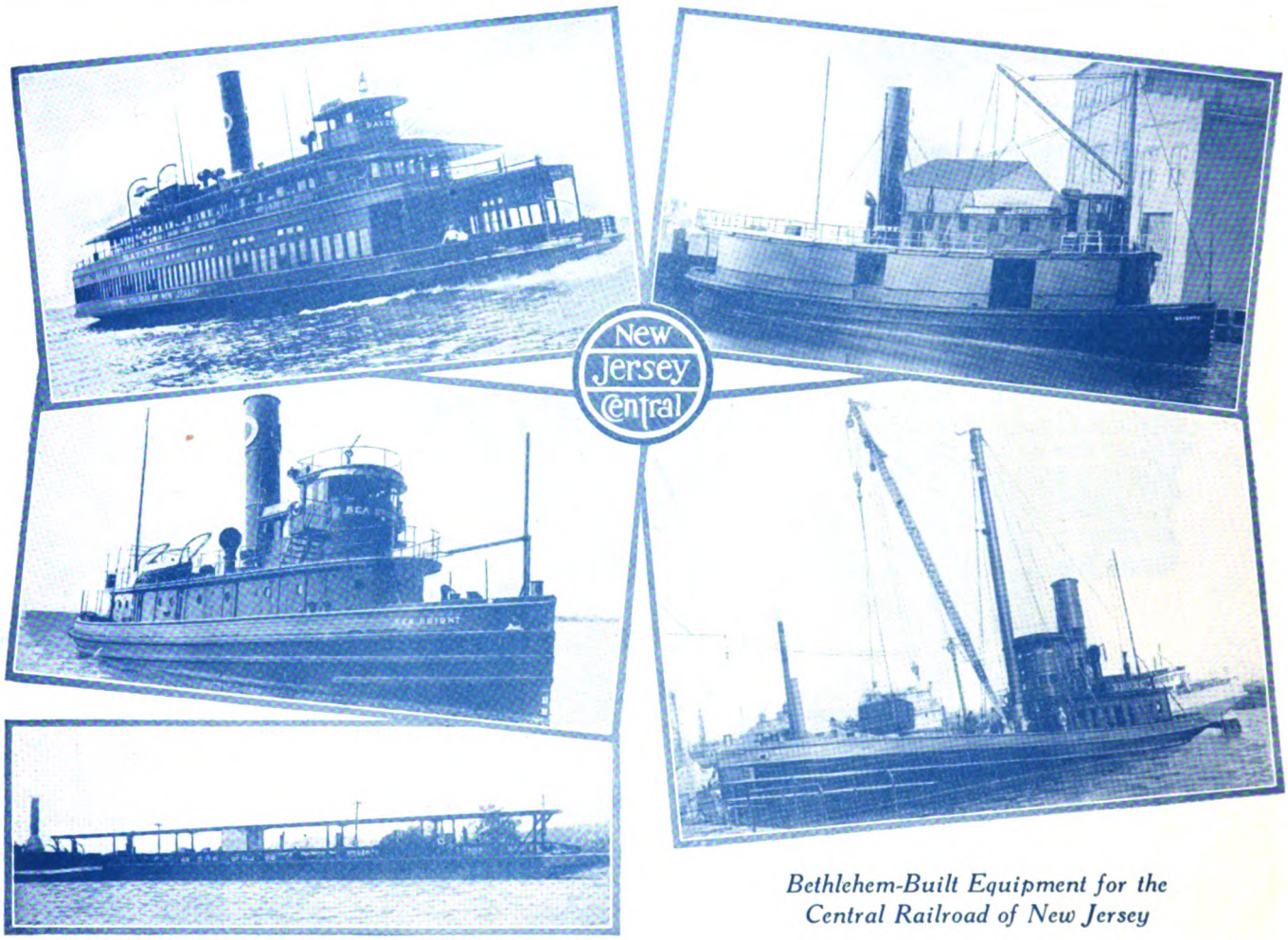
(New York Address, 90 West St.)

DIAMOND POWER SPECIALTY COMPANY
Detroit, Michigan

Diamond

SOOT BLOWERS - SAVE 4 to 8% FUEL

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



Bethlehem-Built Equipment for the Central Railroad of New Jersey

Bethlehem-Built
Floating Equipment for Railroads

PLANTS
FORE RIVER
Boston, Mass.
MOORE
Elizabeth, N. J.
UNION
San Francisco, Cal.
HARLAN
Wilmington, Del.
SPARROW'S POINT
Sparrow's Point, Md.
BALTIMORE DRY DOCKS
Baltimore, Md.
REDINGTON
Redington, Pa.

Floating Equipment operated by the Central Railroad of New Jersey is representative of a large number of fleets of harbor craft that have been constructed by Bethlehem yards for Railroad Companies, Steamship Lines and Municipalities.

Bethlehem - Built Equipment for the C.R.R. of N. J. includes—

Steamer—
Sandy Hook

Ferryboats—
Bayonne
Cranford
Faston
Mauch Chunk
Westfield
Lake Wood
Bound Brook
Red Bank
Plainfield
Elizabeth

Tugboats—
Sea Bright
Bridgeton
Ashley

Lighters—
Bayonne

Keyport
Easton
Mauch Chunk

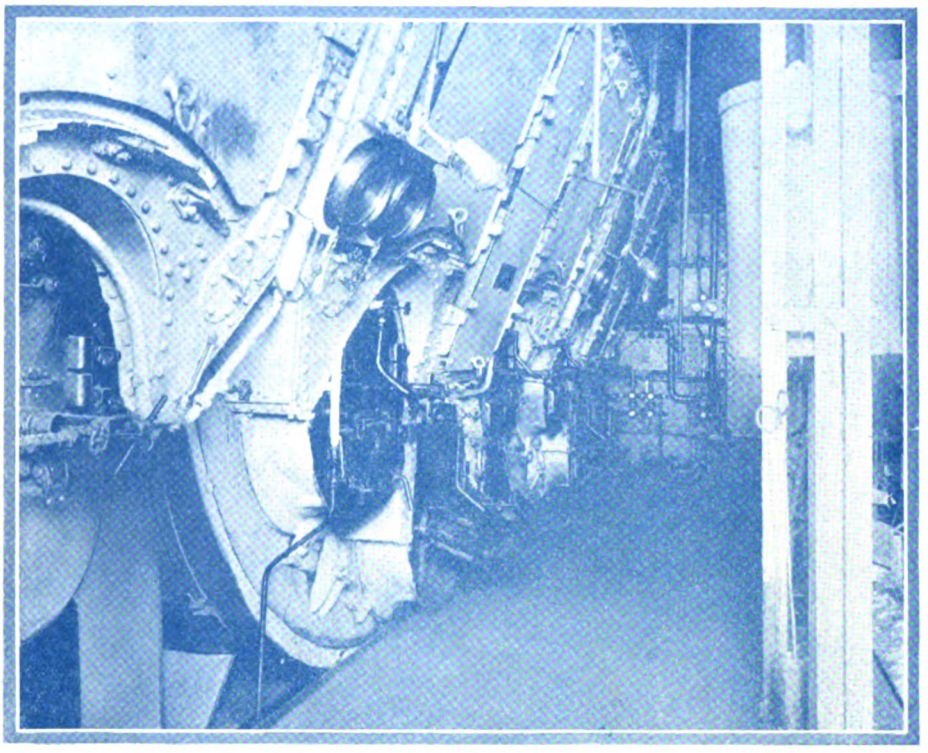
Carfloats—
Six two-track
Seven three-track

BETHLEHEM SHIPBUILDING CORPORATION, LTD.
General Offices: **BETHLEHEM, PA.**
Sales Offices

New York
Boston
Philadelphia
Baltimore
Washington
Atlanta
Pittsburgh
Cleveland
Detroit
Chicago
St. Louis
San Francisco

BETHLEHEM

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



Bethlehem (Dahl) Oil Burner Installation on S. S. Eclipse
(First Electric Driven Cargo Vessel)

For the Economical Generation of Power—

Bethlehem (Dahl) Mechanical Oil Burning System

LOW FUEL OIL CONSUMPTION
SIMPLICITY OF OPERATION
LOW FIRST COST

In the Bethlehem (Dahl) Mechanical Fuel Oil Burning System, low fuel oil consumption is obtained by correct design of the burner parts based on an intimate knowledge of the requirements of oil burning.

By means of the positive control on the furnace front, the air supply is regulated to give the proper volume for perfect combustion.

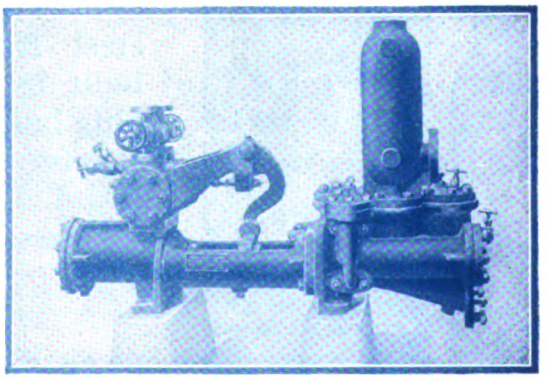
Low fuel oil consumption, simplicity of operation, low first cost—are characteristics of the Bethlehem (Dahl) system.

Write for Catalog O

BETHLEHEM SHIPBUILDING CORPORATION, LTD
General Offices: BETHLEHEM, PA.

Sales Offices:

New York	Baltimore	Pittsburgh	Chicago
Boston	Washington	Cleveland	St. Louis
Philadelphia	Atlanta	Detroit	San Francisco



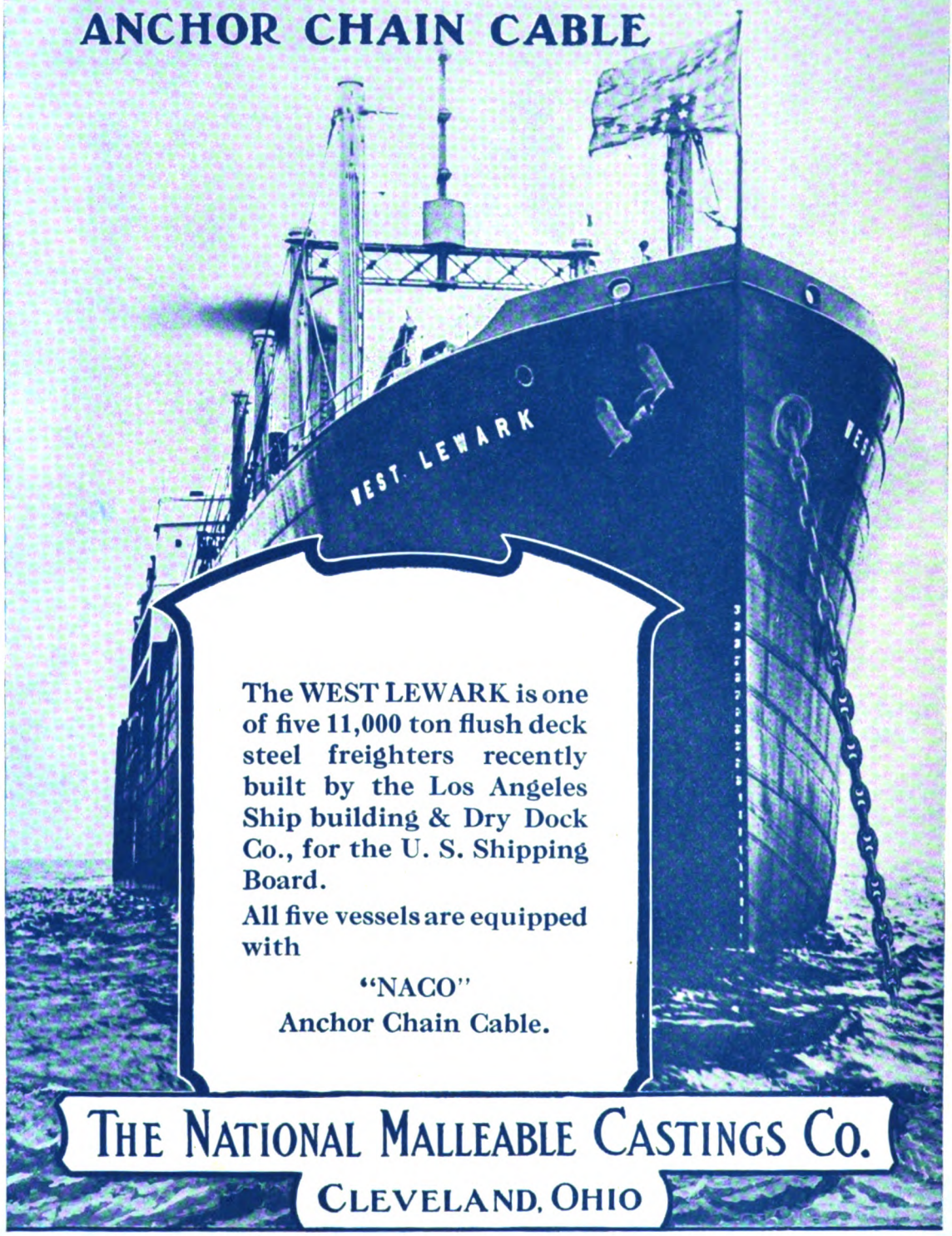
Fuel Oil Service Pump

Bethlehem-Weir fuel oil service pumps, are guaranteed to deliver the oil at any predetermined **constant** pressure at the burner tips.
Catalog WA shows the Bethlehem-Weir line in full.

BETHLEHEM

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Safeguarded by
"NACO"
ANCHOR CHAIN CABLE



The WEST LEWARK is one of five 11,000 ton flush deck steel freighters recently built by the Los Angeles Ship building & Dry Dock Co., for the U. S. Shipping Board.

All five vessels are equipped with

"NACO"
Anchor Chain Cable.

THE NATIONAL MALLEABLE CASTINGS CO.
CLEVELAND, OHIO

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

LUNKENHEIMER

"Victor" Gate Valves

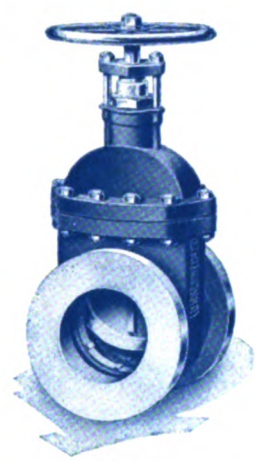


Fig. 941
Iron Body Bronze Mounted.
For pressures up to 125 lbs.

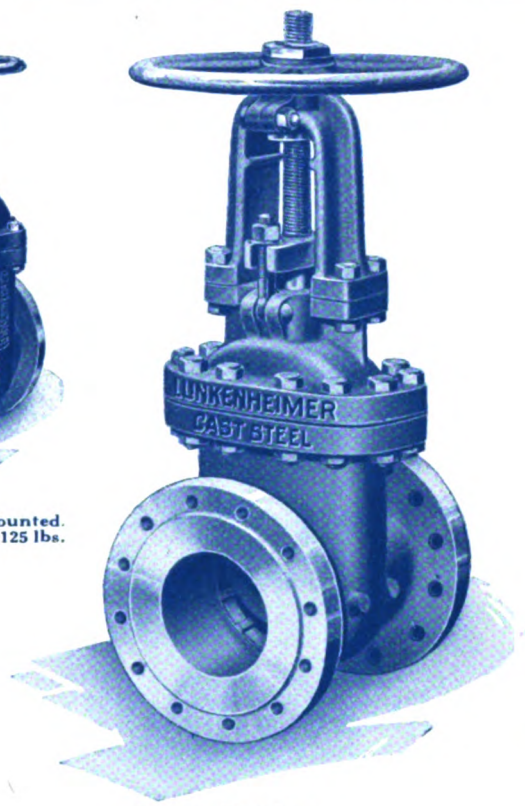


Fig. 1353, Cast Steel.
For pressures up to 350 lbs.

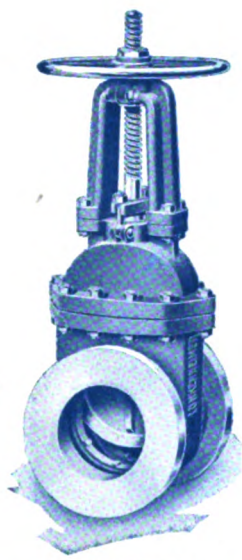


Fig. 787, Bronze.
For pressures up to 250 lbs.

Dependable performance is the service record of LUNKENHEIMER "Victor" GATE VALVES. The Lunkenheimer solid wedge disc, double-faced and guided in its travel, is the most practical design of Gate Valve construction. It eliminates "dragging" across the seatring faces and the consequent wear prevalent in valves employing loose parts.

Highest quality materials, coupled with the Lunkenheimer method of manufacture; bearings bushed to minimize wear; all parts including the seatrings renewable, and the indestructible gasket between the bonnet and body flanges, all tend to enhance their value and insure longevity.

Lunkenheimer "VICTOR" Gate Valves are made in bronze for pressures up to 125 and 250 pounds; in Iron Body Bronze Mounted for pressures up to 100, 125, 175 and 250 pounds, and in Cast Steel for pressures up to 350 pounds and temperature to 800° F. A complete line covering every service requirement.

LUNKENHEIMER DISTRIBUTORS situated in practically every port carry LUNKENHEIMER PRODUCTS in stock for immediate delivery. Specify LUNKENHEIMER and insist on getting what you specify.

THE LUNKENHEIMER CO.
"QUALITY"
LARGEST MANUFACTURERS OF
HIGH GRADE ENGINEERING SPECIALTIES
IN THE WORLD
NEW YORK CHICAGO CINCINNATI BOSTON LONDON
EXPORT DEPT. 129-135 LAFAYETTE ST., NEW YORK

CURRENT EDITION
OF CATALOG BEARS
No 58
COPIES PROCURABLE FROM
LUNKENHEIMER
DISTRIBUTORS

6-23M-6

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

TODD SHIPYARDS CORPORATION

WORLD'S LARGEST SHIP-REPAIR ORGANIZATION

SHIP REPAIRING SHIP BUILDING ENGINEERING

NINETEEN FLOATING DOCKS
TWO GRAVING DOCKS
TWELVE BUILDING WAYS

PLANTS

ROBINS DRY DOCK AND REPAIR CO.
ERIE BASIN, BROOKLYN

TIETJEN & LANG DRY DOCK CO.
HOBOKEN, NEW JERSEY

TEBO YACHT BASIN CO.
FOOT OF 23RD ST., BROOKLYN

CLINTON DRY DOCK CO.
FOOT OF CLINTON ST., BROOKLYN

TODD DRY DOCK & CONSTRUCTION CORP.
TACOMA, WASHINGTON.

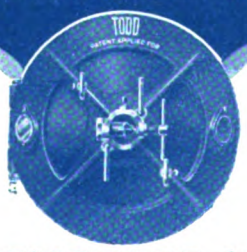
TODD DRY DOCKS INC.
HARBOR ISLAND, 16TH AVE., S.
SEATTLE, WASH.

CABLE ADDRESS—'ROBIN' N. Y. ALL CODES

Main Office: Cunard Bldg., 25 Broadway, New York

TODD-SYSTEMS-WHITE

MECHANICAL OIL BURNING



EFFICIENCY
SIMPLICITY

RELIABILITY
ECONOMY

660 INSTALLATIONS

On Vessels of the Leading Steamship Companies, U.S. Shipping Board and U.S. Navy Including Many of the Largest and Most Powerful Steamships in the World

AGENTS

SAN FRANCISCO AND SOUTHERN CALIFORNIA
FORD AND GERRINE
Merchants Exchange Building
SAN FRANCISCO

PHILADELPHIA
CORNELL AND MATTHEW
Bulletin Building
PHILADELPHIA

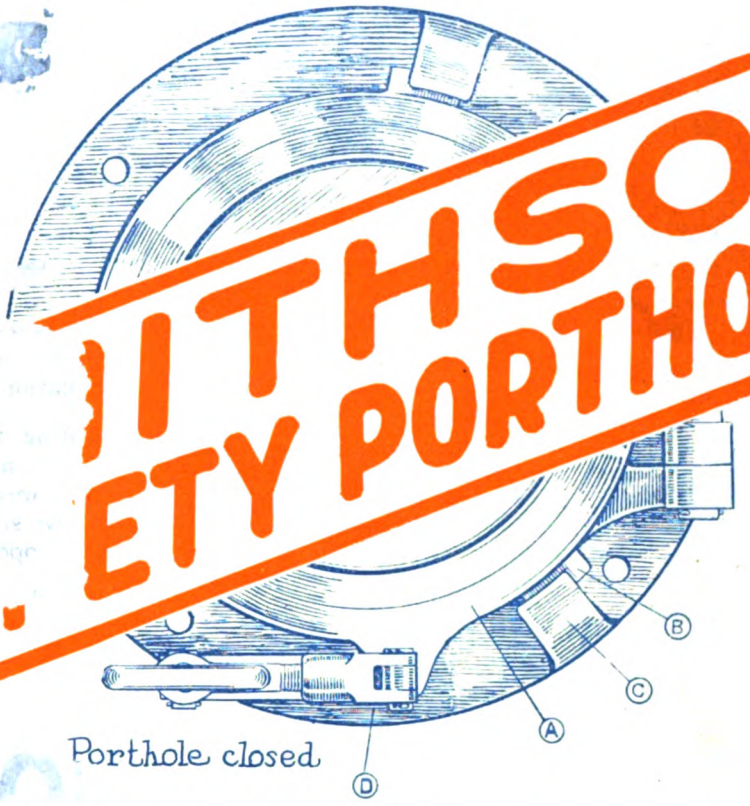
SEATTLE AND NORTH WEST
TODD DRY DOCKS INC.
Harbor Island
SEATTLE, WASHINGTON

LET OUR EXPERTS ADVISE YOU ····· ESTIMATES FURNISHED

TODD · SHIPYARDS · CORPORATION
— PLANT OF —
WHITE FUEL OIL ENGINEERING CORP.
ENGINEERS Cunard Bldg., 25 Broadway, New York PARSONS TURBINES

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

O [illegible]
at
Marine Exposition
Nov. 14-19, 1921
Booth 61
18th St. and 6th Ave.
New York City



Porthole closed

SMITHSON SAFETY PORTHOLE

Made in All Sizes for All Classes of Vessels

[illegible]ON: The "*Smithson*" *Safety Porthole* can be opened or closed by hand [illegible] SECOND without spanner or key, and when closed is perfectly wa[illegible]ht. It can be provided with an automatic lock which is so arranged that the p[illegible]t can be left under control of the passenger WHEN DESIRABLE, or locked in a few seconds by simply removing key.

The Porthole is *fastened* by means of a rotating ring A, carrying wedge blocks B, which engage under lugs C on the base frame when the port is closed, thus making a good joint with uniform pressure all around, and rendering it impossible to strain the door. The ring A is rotated by toggle D.

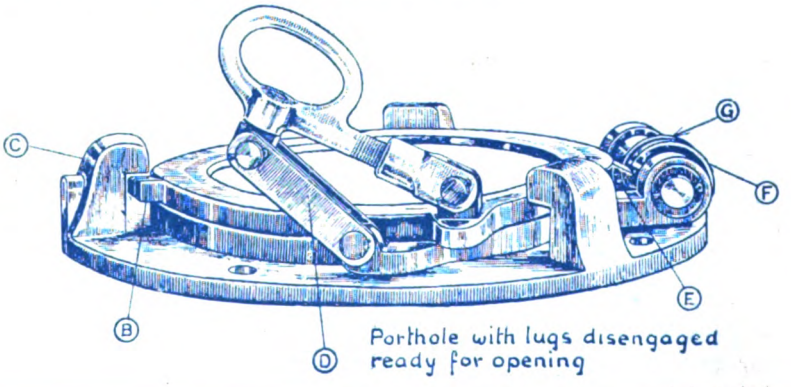
To *open*, handle of toggle mechanism is pulled, which rotates the ring until it reaches proper position, when the stop E having passed through the slot in collar F brings up against collar G and prevents further movement of ring, and allows port to open.

The handle is pushed to *close* the port, and stop E cannot pass collar F, until the door is quite shut, when it passes through the slot, allowing the rotating ring to move and engage the wedge blocks under the lugs.

Write us today for full details.

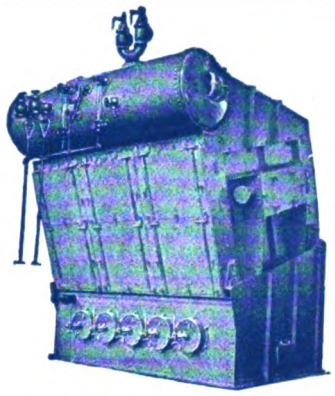
Let us explain the importance of installing "Smithson" Safety Portholes.

MERCANTILE SPECIALTIES CORP.
11 BROADWAY
NEW YORK



Porthole with lugs disengaged ready for opening

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



FOSTER MARINE BOILER CORPORATION

111 Broadway New York

Branches:

Boston, 50 Congress Street.
Philadelphia, Land Title Building.
Pittsburgh, Oliver Building.
Chicago, Harris Trust Building.
San Francisco, Balboa Building.

Agencies:

Norfolk, T. J. Egan Company
New Orleans, Marine Supply Company.
Galveston, Neptune Ship Chandlery Company.

Works:

Edgemoor, Del.; Oil City, Pa.; Springfield, Ill.; Portland, Ore.

THE FOSTER BOILER

Several of the most important features of a marine boiler have been briefly reviewed during the past year. All of these fundamental facts presented consecutively in their relative importance make clear the present-day marine boiler situation and its future trend.

During the previous year we gave specific cases of performance, fuel economy and other important facts relating to ships equipped with Foster Boilers. The many requests for our catalog show that marine engineers have been following this series of facts.

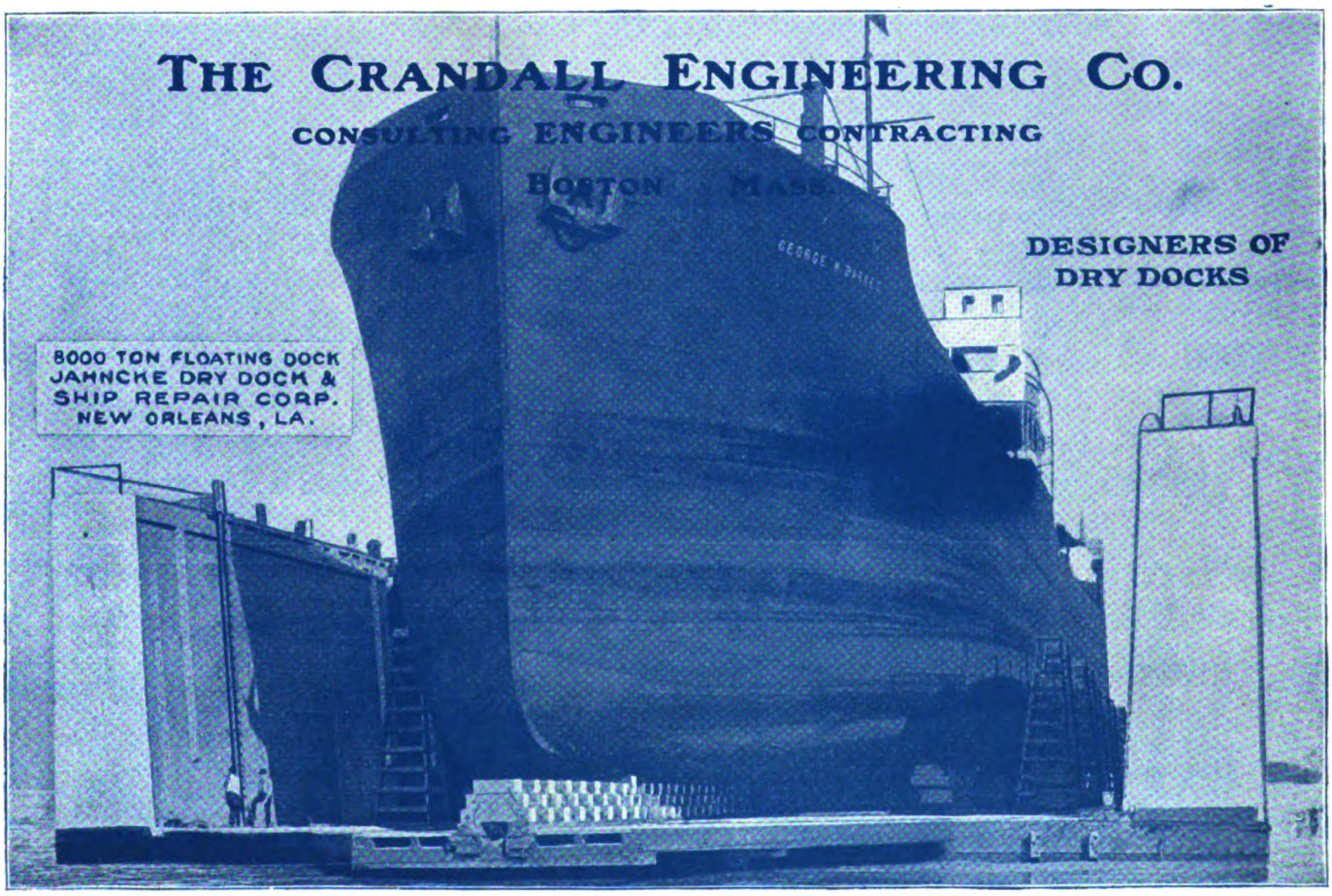
The performance of the Foster Boiler in marine service has given it a well deserved reputation for safety, economy, capacity, and low cost that is fast making it the leading marine water tube boiler. The continued highly satisfactory performance of Foster Boilers at sea has resulted in several duplicate installations being made.

During the coming year we expect to add many new friends to our already large number and also give still more evidences of reliable operation.

We shall be glad to send a copy of the Foster Catalog to anyone interested in marine boilers.

FOSTER MARINE BOILERS

26



Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

When You Buy

A-E-CO Auxiliaries

We Build

Steering Gear

Telemotors

Windlasses

Winches

Towing Machine

Capstan

Gypseys

Chandlery

you get more than a piece of machinery; more than so many pounds of metal; more than a name.

You Get Experience

covering sixty years of designing and building marine auxiliaries, culminating in a definite knowledge of what to build and how to build it.

You Get Service

of a character that has no superior. A service that is constantly competing with itself.

You Get Satisfaction

Ask for Catalogs

Offices

New York

Boston

Philadelphia

Cleveland

San Francisco

New Orleans

Seattle

Victoria, B. C.

American Engineering Company

Philadelphia

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from NEW YORK PUBLIC LIBRARY

H. J. HUSH

40 West 60th Street 119 Liberty Street Grand Central Palace
NEW YORK CITY

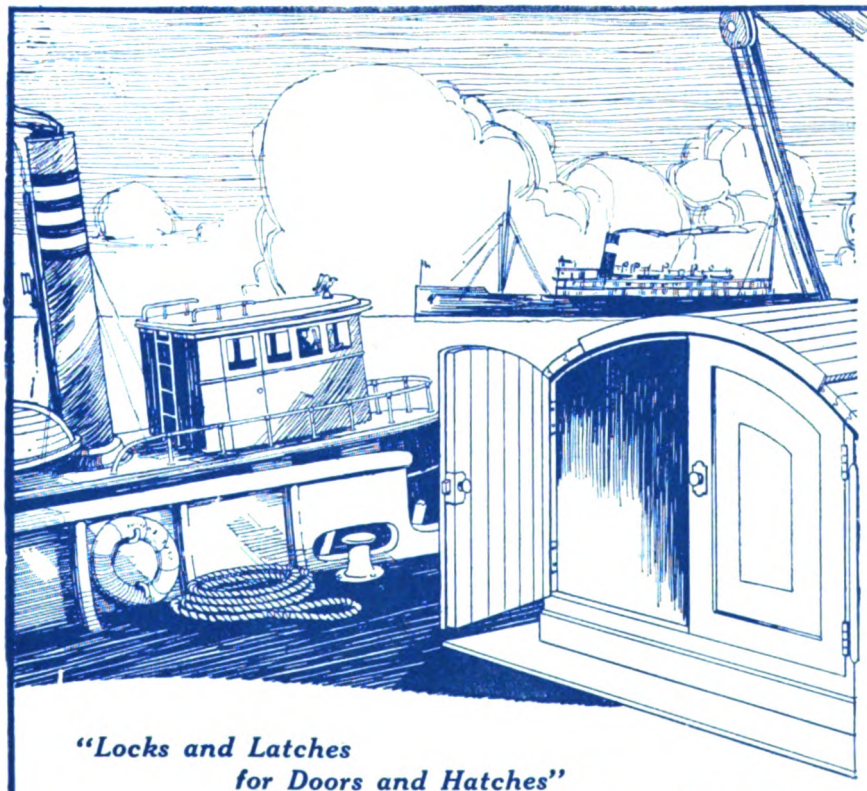
HUSH LINES
Hoist Outfits Portable Derricks Power Plants Pumping Units
Air Compressors D-C Arc Welding Units

Visit Booth 21

WE REPRESENT

DOMESTIC ENGINE & PUMP CO. Shippensburg, Pa.	Power, Pumping, Hoisting Engines From 2 to 15 Horse Power
MUNCIE OIL ENGINE CO. Muncie, Indiana	Fuel Oil Engines 10 to 250 Horse Power Units
RELIABLE TRACTOR & ENGINE CO. Portsmouth, Ohio	Power, Pumping, Welding and Hoisting Engines 10 to 55 Horse Power; 2 Cylinder Opposed
STROUDSBURG ENGINE WORKS Stroudsburg, Pa.	Steam, Electric, Gasoline, Kerosene Hoisting Units
HUSH ENGINES	D-H Engine—Power, Pumping, Hoisting

Office, Service, Warehouse: 40 West 60th Street, New York



First Go To
Tiebout

*"We've looked all over for these things—
and here you have them right in stock."*

Many new customers are astonished at the complete range of our stock.

It is an old story with our clientele of years' standing.

Simply the result of years spent in studying the needs of the trade.

Marine Hardware
Cabinet and Refrigerator Hardware

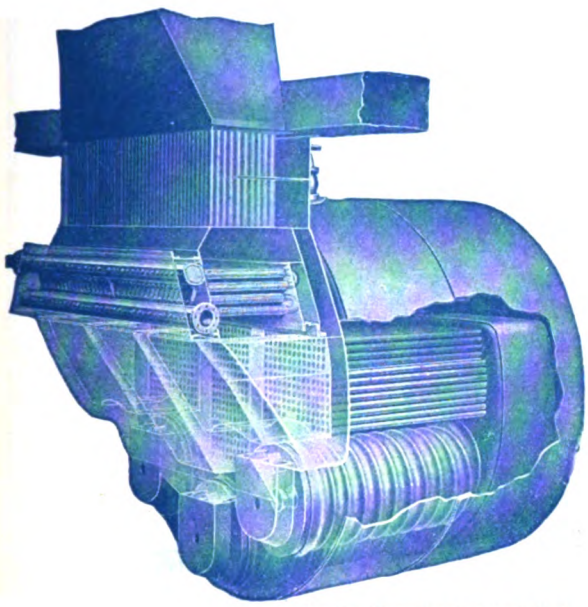
"Locks and Latches for Doors and Hatches"

W. & J. TIEBOUT

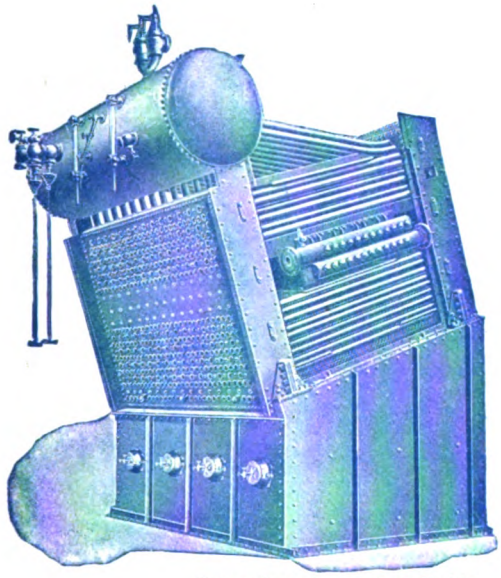
Established 1853 Incorporated 1892
118 Chambers Street New York City

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

The increasing use of superheat in the marine field



Foster Superheater installed in the uptake of Scotch boiler



Foster Superheater installed in tube bank of Foster Marine water-tube boiler

The cost of marine fuel has increased in the last few years to a point where it is receiving considerable attention. To improve the fuel economy of marine propelling equipment, water-tube boilers, turbines, and high vacuum equipment have been installed, on many ships, and over one thousand ships have been fitted with superheaters.

The fuel consumption of an existing installation can be reduced at less expense by adding superheaters than by any other method, and the fuel saving effected by Foster Superheaters is greater than obtained from high priced, high grade equipment of other types. In many cases the cost of Foster Superheaters has been saved in from two to three years operation. This is particularly true in the case of Scotch marine boilers where the superheat can be obtained from the waste gases without any additional fuel being burned.

In a very recent case a large tow boat company checked the performance of two duplicate tugs, one with and the other without Foster waste heat type superheaters. The fuel saving of 20% is paying for the superheaters in less than two years.

In many Scotch boilers the steam space is small and when the boilers are salted severe priming occurs causing rapid wearing of turbine blades or short life of engine piston rings. Foster waste heat superheaters entirely eliminate this trouble and save considerable in turbine or engine repairs. This also prevents delays in the ship's operation which result in a very attractive additional saving.

Superheat has become standard in land plants and at the present rate of progress will be standard in marine plants in the next few years. If America is to keep her place on the seas her ships must follow the proven economy of her land plants. The American stationary plants are admitted the peer of all others and the American marine plants will unquestionably win the same prestige when advantage is taken of known successful fuel saving methods.

Send for the Foster Superheater Book 54

Power Specialty Company

GENERAL OFFICES: 111 Broadway, New York

BRANCHES:

Boston, 50 Congress Street Philadelphia, Land Title Building Pittsburgh, Oliver Building Dallas, Linz Building
Chicago, Harris Trust Building San Francisco, Balboa Bldg. Kansas City, Reliance Building

AGENCIES:

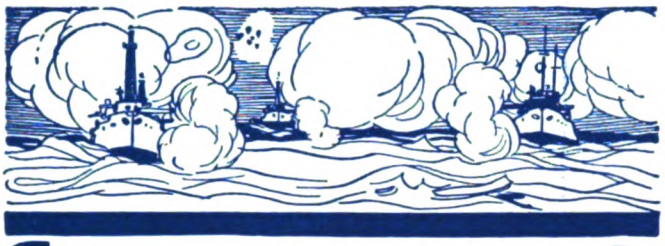
Baltimore, Steamship Engineering Equipment Company New Orleans, Marine Supply Company
Galveston, Neptune Ship Chandlery Company

WORKS: Dansville, N. Y., and St. Albans, Hertford, England

FOSTER SUPERHEATERS

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-08-28 00:07 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



FORGED STEEL
MARINE WATER TUBE BOILERS
and SUPERHEATERS for
STEAM VESSELS OF ALL CLASSES

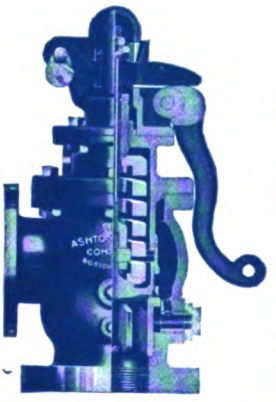
3 Million Horse Power for Naval Vessels
3 Million Horse Power for Merchant Steamers.

EXPRESS TYPE BOILERS (White-Forster)
3-¼ Million Horse Power for U. S. Navy

MECHANICAL ATOMIZING OIL BURNERS
650 Boilers; 5000 Burners; 1½ Million Horse Power

The Babcock & Wilcox Co.
NEW YORK and LONDON

BRUNSWICK
REFRIGERATING AND ICE MAKING MACHINERY
"The standard for all marine installations"
BRUNSWICK REFRIGERATING CO.
800-850 Jersey Ave., New Brunswick, N. J.



Ashton
Dependable High Grade
Pop Valves, Steam Gages
Whistles
Specially Adapted for
High Pressure Marine Service
Unequalled for Efficiency, Durability and Low Cost of Maintenance
The Ashton Valve Co.
161 First St. Cambridge, Mass.
Branches
New York Boston Chicago San Francisco

Will You be Ready?

THOSE who follow the sea have always believed in preparedness. The good sailor makes things fit while the weather is fair and when the storm breaks, his vessel most always weathers it.

When the great war came the cry went up for ships and more ships to transport men and arms. The country responded as never before. Ship yards became veritable bee hives of industry and the answer to the call came from the square rigger as well as the ocean greyhound.

Likewise today we are entering a new period of preparedness, serious and altogether vital to the future of both American and world ships.

A stagnant market cannot last forever. History has proven that good business years always follow depression. Already the foreign market is reaching out for American goods.

The call for ships is coming again, how soon no one knows but its coming is certain. Not through the proclamation of war, this time, but in answer to the demands of a healthy world trade will our fleets find cargoes.

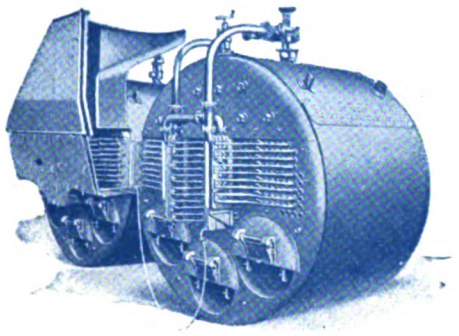
Ships must be in condition to meet these demands. Now while shipping is quiet is the time to overhaul and make things fit.

Are you going to be ready for new business?

Reprinted through the courtesy of the Morse Dry Dock & Repair Co., Brooklyn, N. Y.

Generated on 2024-08-28 00:08 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Why Superheat



Fire Tube Superheater Installation in a Scotch Marine Boiler

More than 2000 FOREIGN SHIPS are operating with highly Superheated Steam. These ships are in competition with American tonnage and are 10% MORE ECONOMICAL in fuel.

In high degree Fire Tube Superheaters the American operator has an opportunity to place his ships on a basis as efficient and economical as that of any of his foreign competitors.

High degree Fire Tube Superheaters are contributing to the efficiency of a growing number of American ships.

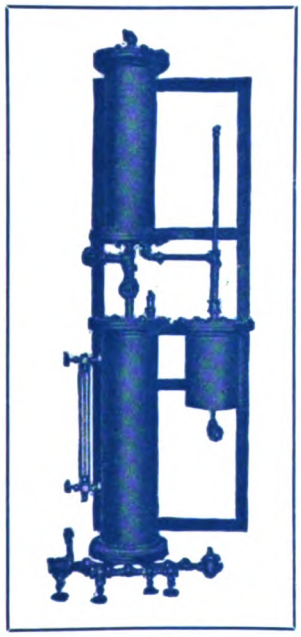
THE SUPERHEATER CO.

General Offices: 17 East 42nd Street, *New York*

CHICAGO: *Peoples Gas Bldg.*

For Canada, THE SUPERHEATER COMPANY, Ltd., *Montreal.*

Designing Engineers and Manufacturers of ELESCO Steam Superheaters and Pipe Coils for all purposes. Feed Water Heating Equipment for Locomotive Service. Boiler Feed Pumps for all Services.



Pure Drinking Water For Lake Steamers

To comply with the Law, all vessels operating on the Great Lakes must carry equipment for producing pure drinking Water. The most up-to-date apparatus for this service is the

G-R Evaporator Set

Reilly Evaporator Reilly Distiller G-R Aerating Filter

equipped with interconnecting piping, fittings, valve and traps, mounted on angle iron frame.

Occupies space of 2½ ft. by 7½ ft.

Capacity 30 gallons per hour.

Send for information

THE GRISCOM-RUSSELL CO.

2121 West Street Building, New York

Chicago Office: 835-A Monadnock Block

Philadelphia, Boston, Hartford, Springfield

Pittsburgh, Cleveland, Toledo, Detroit

Chicago, Minneapolis, Milwaukee, St. Louis, Denver

New Orleans, Houston, Fort Worth, Charlotte, Salt Lake City

San Francisco, Seattle, Los Angeles, Kansas City

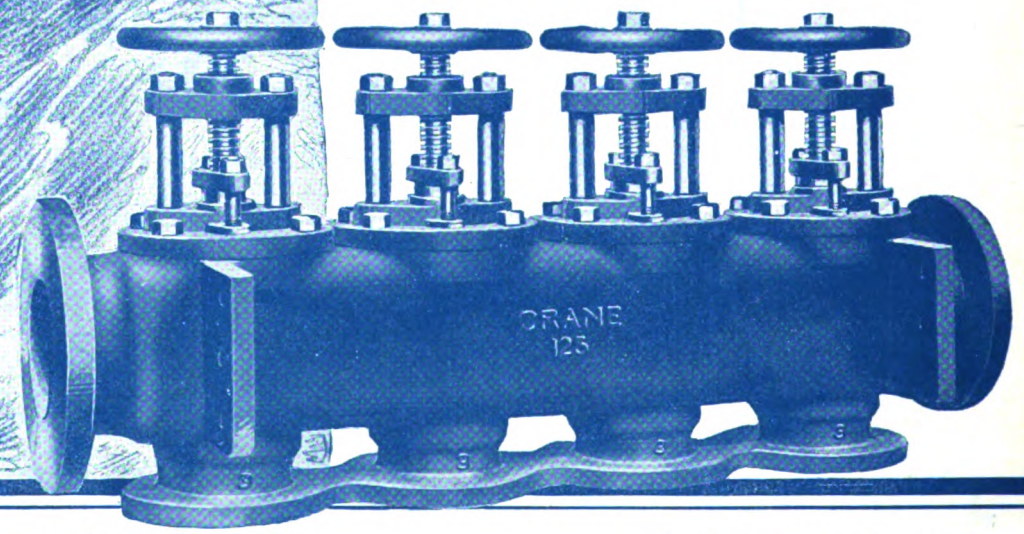
Generated on 2024-08-28 00:07 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

WHEN at sea a ship is tested without mercy. Ocean and wind make no allowances. Beneath the decks of ships is enormous horse-power, the efficiency of which depends upon the installation of correct valves, fittings and other mechanical appliances.

The CRANE line of MARINE MATERIAL

includes the entire system of fabricated piping—valves, fittings, specials, bends, etc.—in steel, brass, iron or copper.

We are manufacturers of about 20,000 articles, including valves, pipe fittings and steam specialties, made of brass, iron, ferrosteel, cast steel and forged steel, in all sizes, for all pressures and all purposes, and are distributors of pipe, heating and plumbing materials



SALES OFFICES, WAREHOUSES AND SHOWROOMS:

BOSTON, SPRINGFIELD, HARTFORD, BRIDGEPORT, ROCHESTER, NEW YORK, HARLEM, ALBANY, BROOKLYN, PHILADELPHIA, READING, ATLANTIC CITY, NEWARK, CAMDEN, BALTIMORE, WASHINGTON, SYRACUSE, BUFFALO, SAVANNAH, ATLANTA, KNOXVILLE, BIRMINGHAM, MEMPHIS, LITTLE ROCK, MUSKOGEE, TULSA, OKLAHOMA CITY, WICHITA, ST. LOUIS, KANSAS CITY, TERRE HAUTE, CINCINNATI, INDIANAPOLIS, DETROIT, CHICAGO, ROCKFORD, OSHKOSH, GRAND RAPIDS, DAVENPORT, DES MOINES, OMAHA, SIOUX CITY, MANKATO, ST. PAUL, MINNEAPOLIS, WINONA, DULUTH, FARGO, WATERTOWN, ABERDEEN, GREAT FALLS, BILLINGS, SPOKANE, SEATTLE, TACOMA, PORTLAND, POCATELLO, SALT LAKE CITY, OGDEN, RENO, SACRAMENTO, OAKLAND, SAN FRANCISCO, LOS ANGELES

FOUNDED BY R. T. CRANE, 1855

CRANE CO.

836 S. MICHIGAN AVE.

CHICAGO

WORKS: CHICAGO AND BRIDGEPORT

CRANE LIMITED — MONTREAL, TORONTO, VANCOUVER, WINNIPEG, CALGARY, REGINA, HALIFAX, OTTAWA.

CRANE-DENNETT, LTD. — LONDON, ENG.

Generated on 2024-08-28 00:07 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Setting the broken nose of commerce

THE oxy-acetylene welding and cutting torches—those twin metal surgeons—are indispensable in ship yards.

Wherever metals must be cut or joined neatly, quickly and economically the oxy-acetylene process is invaluable.

Prest-O-Lite

DISSOLVED ACETYLENE

because of its portability, has made it possible to weld or cut in the most inaccessible places. Wherever the job may be—below or aloft, inside or out—Prest-O-Lite goes to the job!

Forty Plants and Warehouses insure a constant and unlimited supply of uniformly pure gas. Write us about the Prest-O-Lite nation-wide service plan.

THE PREST-O-LITE COMPANY, Inc.

General Offices

Carbide and Carbon Building, 30 East 42nd Street, New York

Balfour Building, San Francisco

In Canada: Prest-O-Lite Co. of Canada, Limited, Toronto

PW-503-21

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

"Where-To-Buy"

A classified-by-products list of advertisers for the convenience of readers. If you don't find what you want, write us and we will tell you where to get it. ¶ Index to advertisements will give you page number of any advertiser and by referring to advertisement you can get full particulars about products.

ACETYLENE CYLINDERS

Air Reduction Sales Co., 342 Madison Ave., New York.
Linde Air Products Co., 30 E. 42nd St., New York City.
Prest-O-Lite Co., Inc., 30 E. 42nd St., New York City.

AIR COCKS

Victory Equipment Corp., Haydenville, Mass.

AIR TOOLS

Oldham, Geo., & Son, Co., Scott and McHenry Sts., Baltimore, Md.

ANCHOR HOISTS

American Engineering Co., Cumberland & Aramingo Sts., Philadelphia, Pa.
Mundy, J. S., Hoisting Engine Co., 722 Frelinghuysen Ave., Newark, N. J.
Superior Iron Works Co., Superior, Wis.

ANCHORS

American Engineering Co., Philadelphia, Pa.
Baldt Anchor & Chain Co., 6th and Butler Sts., Chester, Pa.
Carpenter, Geo. B., & Co., 436 N. Wells St., Chicago, Ill.
Wilcox, Crittenden & Co., Middletown, Conn.

AMUSEMENT DEVICES

Craig Golfmeter Co., 590 Howard St., San Francisco, Cal.

ARCHITECTS (Naval)

Donnelly, Wm. T., 17 Battery Place, New York.

ARMOR (Submarine)

Morse, A. J., & Son, Boston, Mass.

ASBESTOS COVERINGS (Pipe and Boiler)

American Insulation Co., Roberts Ave. & Stokley St., Philadelphia, Pa.

ATTORNEYS AND PROCTORS IN ADMIRALTY

Siggers & Siggers, Nat'l Union Ins. Bldg., Washington, D. C.
Warren, Cady, Hill & Hamblen, Union Trust Bldg., Detroit, Mich.

BABBITT METALS

National Lead Co., 111 Broadway, New York, N. Y.

BEDDING

Bernstein Mfg. Co., 3d St. and Alle Ave., Philadelphia.

BEDSTEADS

Bernstein Mfg. Co., 3d St. and Alle Ave., Philadelphia.

BELLS

Tiebout, W. & J., 118 Chambers St., New York.

BERTHS, BUNKS AND BEDS (Metal)

Bernstein Mfg. Co., 3d St. and Alle Ave., Philadelphia.

BINNACLES

Ritchie, E. S., & Sons, Brookline, Mass.

BITUMINOUS ENAMEL AND SOLUTION

Otello & Bitmo Corp., The, 23 Park Place, New York, N. Y.

BLACKSMITHS

Crane's, Theo. A., Sons Co., Erie Basin, Brooklyn, N. Y.

BLOCKS

Boston & Lockport Block Co., 124 Condor St., E. Boston, Mass.
Marine Decking & Supply Co., 1011 Chestnut St., Philadelphia, Pa.

BLOWERS (Flue)

American Ship Building Co., Cleveland, O.

BLOWERS (Soot)

Diamond Power Specialty Co., Detroit, Mich.

BOATS (River)

Ward, Charles, Engineering Works, Charleston, W. Va.

BOILER CLEANING DEVICES

Geyser Boiler Appliance Co., 661 Atwater St., Detroit, Mich.

BOILER MAKERS

Crane's, Theo. A., Sons Co., Erie Basin, Brooklyn, N. Y.
New York Shipbuilding Corp., 120 Broadway, New York, N. Y.

BOILER NOZZLES

Continental Iron Works, The, West and Calyar Sts., Brooklyn, N. Y.

BOILER REPAIRS

Standard Shipbuilding Corp., Shooters Island, New York.

BOILER RIVETS

Oliver Iron & Steel Co., 10th and Muriel Sts., Pittsburgh, Pa.
Pittsburgh Rivet Co., 38th St. & B. & O. Junction R. R., Pittsburgh.

BOILER ROOM FITTINGS

Crane Co., The, 836 S. Michigan Ave., Chicago, Ill.

BOILER STEAM AND WATER DRUMS (Welded)

Continental Iron Works, The, West and Calyer Sts., Brooklyn, N. Y.

BOILERS (Marine)

Almy Water Tube Boiler Co., 184 Allen St., Providence, R. I.
American Ship Building Co., Cleveland, O.
Babcock & Wilcox Co., 85 Liberty St., New York.
Baltimore Dry Dock & Shipbuilding Co., Locust Point, Baltimore, Md.
Bethlehem Shipbuilding Corp., Ltd., Bethlehem, Pa.
Bath Iron Works, Ltd., Bath, Me.
Bridgeport Boiler Works, The, Housatonic St., Bridgeport, Conn.
Fletcher, W. & A., Co., Hoboken, N. J.
Foster Marine Boiler Corp., 111 Broadway, New York City, N. Y.
Great Lakes Engineering Works, River Rouge, Mich.
New York Engineering Co., 2 Rector St., New York City.
Oldman Boiler Works, 36-40 Illinois St., Buffalo, N. Y.
Todd Shipyards Corp., 25 Broadway, New York City.
Toledo Ship Building Co., Toledo, O.
Wickes Boiler Co., Saginaw, Mich.

BOILERS (Stationary Water Tube)

Ward, Charles, Engineering Works, Charleston, W. Va.

BOILERS (Water Tube)

Almy Water Tube Boiler Co., 184 Allen St., Providence, R. I.
Bridgeport Boiler Works, The, Housatonic St., Bridgeport, Conn.
New York Eng. Co., 2 Rector St., New York City.
Wickes Boiler Co., Saginaw, Mich.

BOLT ROPE (Manila)

American Manufacturing Co., Noble and West Sts., Brooklyn, N. Y.
Whitlock Cordage Co., New York, N. Y.

BOLTS AND NUTS

Frank, Henry, Jr., 347 Hudson St., New York City.
National Lead Co., 111 Broadway, New York, N. Y.
Oliver Iron & Steel Co., 10th and Muriel Sts., Pittsburgh, Pa.

BOOKS (Technical)

Penton Publishing Co., Cleveland, O.

BRASS GOODS AND SPECIALTIES

Detroit Ship Building Co., Detroit, Mich.
Lunkenheimer Co., The, Cincinnati, O.
Tiebout, W. & J., 118 Chambers St., New York.

BRAZING OUTFITS—See TORCHES, BURNERS AND BRAZING OUTFITS (Acetylene, Blow, Oxy-Acetylene)

BRIDGE WALLS (Furnace)

Booth, W. W., 26 Cortlandt St., New York, N. Y.

BROKERS (Vessel)

Boland & Cornelius, 1204 Prudential Bldg., Buffalo, N. Y.
Farley, Edward P., Co., Chicago, Ill.
Hitner's, Henry A., Sons Co., 4501 Richmond St., Philadelphia, Pa.
Kirk & Treene, Inc., 80 South St., New York, N. Y.

BRUSHES (Vulcan Rubber Cemented)

Whiting, John L. Adams, J. J., Co., Boston, Mass.

BURNERS (Acetylene) — See TORCHES, BURNERS AND BRAZING OUTFITS (Acetylene, Blow, Oxy-Acetylene)

CABLES

American Manufacturing Co., Noble and West Sts., Brooklyn, N. Y.
Durable Wire Rope Co., 93 Pearl St., Boston, Mass.
National Malleable Castings Co., Cleveland, O.
Waterbury Co., 63 Park Row, New York City.
Whitlock Cordage Co., New York, N. Y

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

SUN OILS

Good Ships Deserve Viking Marine Engine Oil

VIKING Marine Engine Oil—for thrust bearing and reciprocating engine lubrication—is the latest development among the Sun Marine Oils. It conforms in efficiency with the high standards maintained for years in the famous Sun XX Marine Oil.

Viking Engine Oil, by reason of a special patented refining process, will form a perfect and lasting emulsion with either salt or fresh water.

The body of this emulsion may be varied from a heavy paste-like substance to any consistency by the simple addition of a larger percentage of water.

For lubrication of thrust bearings an emulsion of Viking Oil with from 50 to 75 per cent water is recommended.

When used for main bearings without the addition of water, Viking Oil has high viscosity and extremely low internal frictional values. It will absorb any water that may find its way into the bearings and will feed indefinitely through a wick without clogging the pores.

Although having the saponifiable value of oils highly compounded with blown rape seed, Viking Marine Engine Oil will not deteriorate and become rancid with age.

In addition, Viking Oil is neutral in reaction and contains no fatty acids, thus eliminating the corrosion of metal parts produced by the high acid content of most marine oils. It is unaffected by low temperatures.

* * *

The Sun Company is one of the world's largest producers, refiners and shippers of petroleum products. Its output of lubricating oils alone exceeds a million and a half gallons per week.

The Sun Company has specialized for a quarter century in lubricating oils. It has developed into an organization of lubrication experts, its aim being to supply accurate and efficient lubrication instead of just "oil".

The choice of a lubricant for any particular purpose demands expert advice. Engineers of the Sun Company are available to make an analysis of your lubrication requirements and specify the right oils to meet them. This service is free.

SUN COMPANY

Producer and Refiner of Lubricating Oils, Fuel Oil, Gas Oil, Gasoline and other Petroleum Products

PHILADELPHIA

Branch Offices and Warehouses

Akron	Battle Creek	Cincinnati	Detroit	Indianapolis	Milwaukee	New York	St. Louis
Albany	Boston	Cleveland	Erie	Jackson, Mich.	Montreal	Norfolk	Syracuse
Atlanta	Buffalo	Dallas	Flint	Kansas City, Mo.	Newark	Pittsburgh	Toledo
Baltimore	Chicago	Dayton	Grand Rapids	Los Angeles	New Orleans	San Francisco	Toronto

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-08-28 00:03 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

CABLES (Insulated)
United States Rubber Co.,
1790 Broadway, New York, N. Y.

CABLEWAYS
Flory, S., Mfg. Co.,
95 Liberty St., New York, N. Y.

CALCIUM CARBIDE
Air Reduction Sales Co.,
342 Madison Ave., New York.

CALKING COTTON
Stratford, Geo., Oakum Co.,
165 Cornelison Ave., Jersey City, N. J.

CABLES (Insulated)
United States Rubber Co.,
1790 Broadway, New York, N. Y.

CANVAS PROOFINGS
Robeson Preservo Co., Port Huron, Mich.

CAPSTANS
American Engineering Co., Philadelphia, Pa.
Bethlehem Shipbuilding Corp., Ltd.,
Bethlehem, Pa.
Chase Mach. Co., The,
2313 Elm St. N. W., Cleveland, O.
Flory, S., Mfg. Co.,
95 Liberty St., New York.
Mundy, J. S., Hoisting Engine Co.,
722 Frelinghuysen Ave., Newark, N. J.
Superior Iron Works Co., Superior, Wis.
Wilcox, Crittenden & Co., Middletown, Conn.

CAR FLOATS
American Bridge Co.,
30 Church St., New York, N. Y.

CARDED OAKUM
Stratford, Geo., Oakum Co.,
Jersey City, N. J.

CASTINGS
Atlas Steel Casting Co., Buffalo, N. Y.
Bethlehem Shipbuilding Corp., Ltd.,
Bethlehem, Pa.
Crane Co., The,
836 S. Michigan Ave., Chicago, Ill.
Great Lakes Engineering Works,
River Rouge, Mich.
National Malleable Castings Co.,
Cleveland, O.
Superior Iron Works Co., Superior, Wis.

CASTINGS (Gray Iron)
Lidgerwood Mfg. Co.,
96 Liberty St., New York City.

CASTINGS (Steel)
Atlas Steel Casting Co., Buffalo, N. Y.

CHAINS
American Chain Co., Inc.,
Bridgeport, Conn.
Baldt Anchor & Chain Co.,
6th and Butler Sts., Chester, Pa.
National Malleable Castings Co.,
Cleveland, O.
Wilcox, Crittenden & Co., Midletown, Conn.

CHAINS (Marine)
American Chain Co., Inc.,
Bridgeport, Conn.

CHAINS (Ship Cable)
American Chain Co., Inc.,
Bridgeport, Conn.

CHAINS (Steering Gear)
American Chain Co., Inc.,
Bridgeport, Conn.

CHAINS (Stud Link)
American Chain Co., Inc.,
Bridgeport, Conn.

CHANDLERY MANUFACTURERS
American Engineering Co.,
Cumberland & Aramingo Sts., Philadelphia, Pa.

COAL HANDLING MACHINERY (See MACHINERY, COAL HANDLING

COAL (Bunkers)
Blake, Townsend,
149 Broadway, New York, N. Y.
Commercial Coal Co., Inc.,
11 Broadway, New York, N. Y.
Cory-Mann, George Corp.,
26-28 Beaver St., New York, N. Y.
Hartwell-Lester Coal Export Corp.,
Tribune Bldg., New York, N. Y.
Jewett, Bigelow & Brooks,
17 Battery Place, New York, N. Y.
Lediard & Co., Inc.,
17 Battery Place, New York, N. Y.
United Marine & Fuel Corp.,
113 Broad St., New York, N. Y.

COAL (Producers and Shippers)
Hanna, M. A., & Co., Cleveland, O.
Lorain Coal & Dock Co., Columbus, O.
United Marine & Fuel Corp.,
113 Broad St. New ork, N. Y.

COATINGS
Briggs Bituminous Composition Co., Inc.,
17 Battery Place, New York City.
National Lead Co.,
111 Broadway, New York, N. Y.

COMPASSES
Bubbleless Compass Co., Inc.,
225 Starr St., Brooklyn, N. Y.
Ritchie, E. S., & Sons, Brookline, Mass.

COMPRESSORS (Air)
Kroeschell Bros., Ice Machine Co., Chicago.

CONDENSERS
Great Lakes Engineering Works,
River Rouge, Mich.

CONDENSER SHELLS (Welded Steel)
Continental Iron Works, The,
West and Calyer Sts., Brooklyn, N. Y.

CONVEYORS
General Electric Co., Schenectady, N. Y.

CORDAGE
American Manufacturing Co.,
Noble and West Sts., Brooklyn, N. Y.
Wilcox, Crittenden & Co., Middletown, Conn.

CORDAGE (Manila, Sisal and Other Hard Fiber Rope)
Whitlock Cordage Co., 46 South St. N. Y.

COTTON
Stratford, Geo., Oakum Co., Jersey City, N. J.

CRANES (Electric Traveling, Jib, Hand)
General Electric Co., Schenectady, N. Y.
Shepard Electric Crane & Hoist Co.,
Montour Falls, N. Y.

CUTTING AND WELDING (Oxy-Acetylene Process)—See WELDING AND CUTTING APPARATUS AND SUPPLIES (Oxy-Acetylene Process)

CYLINDERS (Acetylene)—See ACETYLENE IN CYLINDERS

CYLINDERS (Oxygen—See OXYGEN IN CYLINDERS

CYLINDERS (Welded)
Continental Iron Works, The,
Brooklyn, N. Y.

DAVITS
Steward David & Equipment Corp.,
17 Battery Place, New York City.

DECKING (Marine)
Marine Decking & Supply Co.,
1011 Chestnut St., Philadelphia.

DECKING (Lumber)
Long Bell Lumber Co., The,
Kansas City. Mo.

DERRICKS
Lidgerwood Mfg. Co.,
96 Liberty St., New York City.
Mundy, J. S., Hoisting Engine Co.,
722 Frelinghuysen Ave., Newark, N. J.
Superior Iron Works Co., Superior, Wis.

DIES
Keller Pneumatic Tool Co.,
Grand Haven, Mich.

DISTILLING APPARATUS
Griscom-Russell Co.,
2121 West St., Bldg., N. Y. C.

DIVING APPARATUS
Morse, Andrew J., & Son, Inc.,
221 High St., Boston, Mass.

DRAFT (Artificial and Mechanical for Boilers)
American Ship Building Co., Cleveland, O.
Great Lakes Engineering Works,
River Rouge, Mich.

DREDGING MACHINERY
Flory, S. Mfg. Co.,
95 Liberty St., New York.
Great Lakes Engineering Works,
River Rouge, Mich.
Lidgerwood Mfg. Co.,
96 Liberty St., New York City.
Superior Ship Building Co., Superior, Wis.

DREDGING OUTFIT CONSTRUCTORS
Buffalo Dry Dock Co., Buffalo, N. Y.

DRILL BOAT MACHINERY
Superior Iron Works Co., Superior, Wis.

DRILLING MACHINERY
Lynd-Farquhar Co.,
419 Atlantic Ave., Boston, Mass.

DRILLS (Wall Radial)
Lynd-Farquhar Co.,
419 Atlantic Ave., Boston, Mass.

DRY DOCKS
American Ship Building Co., Cleveland, O.
Baltimore Dry Dock & Shipbuilding Co.,
Locust Point, Baltimore, Md.
Bethlehem Shipbuilding Corp., Ltd.,
Bethlehem, Pa.
Crane's Theo. A., Sons Co.,
Erie Basin, Brooklyn, N. Y.
Fletcher, W. & A., Company,
12th to 14th St., Hoboken, N. J.
Great Lakes Engineering Works,
River Rouge, Mich.
Los Angeles Shipbuilding & Dry Dock Co.,
San Pedro, Calif.
Newport News Shipbuilding & Dry Dock Co.,
Woolworth Bldg., New York, N. Y.
Standard Shipbuilding Corp.,
Shooters Island, New York.
Todd Shipyards Corp.,
25 Broadway, New York City.
Toledo Ship Building Co., Toledo, O.

DYNAMOS
General Electric Co., Schenectady, N. Y.

EJECTORS (Ash)
Great Lakes Engineering Works,
River Rouge, Mich.
Marine Decking & Supply Co.,
1011 Chestnut St., Philadelphia, Pa.

ENAMELS (Marine, Exterior, Interior)
Natroco Paint & Varnish Works,
Tonawanda, N. Y.
Otello & Bitmo Corp., The,
23 Park Place, New York, N. Y.

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

BUNKER FUEL OIL

This Company is in a position to offer to the Shipping interests world-wide facilities for bunkering with "Standard" Fuel Oil. This service makes possible the decided economies resulting from the use of "Standard" Fuel Oil.

Ports at which deliveries can be made through arrangements with the Standard Oil Company (New Jersey), 26 Broadway, N. Y.

UNITED STATES

Atlantic and Gulf Ports

*New York — *Norfolk
Boston — *Charleston
*Philadelphia — *New Orleans
*Baltimore — *Baton Rouge

Pacific Coast Ports

Tacoma — *San Francisco
*Seattle — *San Pedro
*Point Wells — *San Diego
Astoria — *Honolulu
*Richmond

CANADA

*Halifax — *Vancouver
*Montreal — Prince Rupert
*Levis (Quebec)

MEXICO

Tampico

PANAMA CANAL

Cristobal — *Balboa

WEST INDIES

Havana — Bermuda
Cienfuegos — Curacao
Nuevitas — St. Thomas
San Juan

SOUTH AMERICA

Rio de Janeiro — Montevideo
Santos — Valparaiso
*Buenos Aires — *Talara
*Campana

*Diesel oil also available.

UNITED KINGDOM

*Purfleet — *Liverpool
*Manchester — *Brixham
*Southampton — *Hull
*Newcastle-on-Tyne
*Sunderland — *Thames Haven

GERMANY

Hamburg — Nordenham

AFRICA

Bizerta

TURKEY

Constantinople

GREECE

Piraeus

CHINA

Hong Kong — Shanghai

JAPAN

Itosaki — Nagasaki

Arrangements will shortly be completed to cover ports in addition to those listed, as follows:

Toronto, Ont.	Pisagua, Chile	Gothenburg, Sweden	Rouen, France	Salonica, Greece
Fort William, Ont.	Tocopilla, Chile	Helsingfors, Finland	Havre, France	Bourgas, Bulgaria
Hamilton, Ont.	Taltal, Chile	Aalborg, Denmark	Marseilles, France	Smyrna, Turkey
Sarnia, Ont.	Paita, Peru	Copenhagen, Denmark	Dunkirk, France	Port Said, Egypt
Quebec (P. Q.)	Callao, Peru	Nyborg, Denmark	La Pallice, France	Alexandria, Egypt
St. John, N. B.	Bahia Blanca, Arg.	Avonmouth, U. K.	Genoa, Italy	Colombo, Ceylon
Victoria, B. C.	Ponta Delgada, Azores	Birkenhead, U. K.	Monopoli, Italy	Singapore, S. S.
Antilla, Cuba	Trondhjem, Norway	Cardiff, U. K.	Portici, Italy	Sydney, Australia
Matanzas, Cuba	Bergen, Norway	Rotterdam, Holland	Savona, Italy	Wellington, N. Z.
Antofagasta, Chile	Christiania, Norway	Amsterdam, Holland	Venice, Italy	Durban, S. A.
Iquique, Chile	Vallo, Norway	Antwerp, Belgium		

STANDARD OIL COMPANY (New Jersey)

26 Broadway, New York

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

ENGINE LATHES

Lynd-Farquhar Co.,
419 Atlantic Ave., Boston, Mass

ENGINEERS (Marine, Mechanical and Consulting)

Bath Iron Works, Ltd., Bath, Maine
Crandall Engineering Co.,
162 Beuax St., Boston
Donnelly, Wm. T., 17 Battery Pl., N. Y. C
Great Lakes Engineering Works,
River Rouge, Mich.
Criscom-Russell Co., New York, N. Y.
Superior Iron Works Co., Superior, Wis.
Todd Shinyards Corp.,
25 Broadway, New York City.
United State Electric Co., The,
New London, Conn.

ENGINEERS' SPECIALTIES

Lunkenheimer Co., The, Cincinnati, O.

ENGINES

Kingsford Fdry. & Machine Works,
Oswego, N. Y.
New York Shipbuilding Corp.,
120 Broadway, New York, N. Y.
Superior Iron Works, Superior, Wis.
Wolverine Motor Works,
Union Ave., Bridgeport, Conn.

ENGINES (Diesel)

New London Ship & Engine Co.,
Groton, Conn
Trout, H. G., King Iron Works,
Buffalo, N. Y.

ENGINES (Hoisting)

Hush, H. J.,
40 W. Sixtieth St., New York, N. Y.

ENGINES (Internal Combustion)

Busch-Sulzer Bros. Diesel Engine Co.,
2nd and Utah Sts., St. Louis, Mo.

ENGINES (Marine)

American Ship Building Co., Cleveland, O.
Bath Iron Works, Ltd., Bath, Me.
Bethlehem Shipbuilding Corp., Bethlehem, Pa.
Chicago Ship Bldg. Co., So. Chicago, Ill.
Fletcher, W. & A. Co., Hoboken, N. J.
McNab Company, Bridgeport, Conn.
Standard Shipbuilding Corp.
Shooters Island, New York.
Superior Iron Works Co., Superior, Wis.
Todd Shipyards Corp.,
25 Broadway, New York City.
Toledo Ship Building Co., Toledo, O.
Trout, H. G., Co., King Iron Works,
Buffalo, N. Y.
Wolverine Motor Works,
Union Ave., Bridgeport, Conn.

ENGINES (Oil)

Busch-Sulzer Bros. Diesel Engine Co.,
2nd and Utah Sts., St. Louis, Mo.
New London Ship & Engine Co.,
Groton, Conn.

EUROPEAN STEAMSHIP LINES (Passenger and Freight)

International Mer. Marine Co.,
9 Broadway, N. Y. C.
Munson Steamship Co.,
67 Wall St., New York, N. Y.

EVAPORATORS

Griscom-Russell Co.,
2121 West St., Bldg., N. Y. C.

FILTERS (Feed Water)

Griscom-Russell Co.,
2121 West St., Bldg., N. Y. C.

FILTERS (Oil)

Anderson, The V. D. Co., Cleveland, O.

FIRE ALARM SYSTEMS

Aero Alarm Co.,
26 Cortlandt St., New York, N. Y
Cory, Chas., & Sons, New York, N. Y.
Walter Kidde & Company, Inc.,
90 West St., New York, N. Y.

FIRE DETECTING SYSTEM

Walter Kidde & Co., Inc.,
90 West St., New York, N. Y.

FIRE FIGHTING EQUIPMENT

Walter Kidde & Company,
90 West St., New York N. Y.

FIREPROOF OAKUM

Stratford, Geo., Oakum Co.,
Jersey City, N. J.

FIXTURES

General Electric Co., Schenectady, N. Y.

FLANGES

Crane Co., The,
836 Michigan Ave., Chicago, Ill.

FLOOD LIGHT PROJECTORS—See PROJECTORS (Electric Flood Light)

FLOORING (Cabin)

Long Bell Lumber Co., The,
Kansas City, Mo.

FLOORING (Rubber)

United States Rubber Co.,
1790 Broadway, New York N. Y.

FORGINGS (Iron and Steel)

Oliver Iron & Steel Co.,
10th and Muriel Sts., Pittsburgh, Pa.

FOUNDERS

American Engineering Co.,
Cumberland & Aramingo Sts., Philadelphia, Pa.
American Shipbuilding Co., Cleveland.
Marine Iron & Shipbuilding Co., Duluth, Minn.
Todd Shipyards Corp.,
25 Broadway, New York City.

FREIGHT FORWARDERS

National Shipping Co., Inc.,
24-26 Stone St., New York City.
Williams Shipping Agency, Inc.,
59 Pearl St., New York, N. Y.
Wolgast, A. O., 59 Pearl St., New York, N. Y.

FREIGHT HANDLING EQUIPMENT

Lidgerwood Mfg. Co.,
96 Liberty St., New York.

FREIGHT SERVICE

Munson Steamship Co.,
67 Wall St., New York, N. Y.
U. S. Shipping Board, Washington, D. C.

FUEL OIL

Standard Oil Co. of New Jersey,
26 Broadway, New York.
United Marine & Fuel Corp.,
113 Broad St., New York, N. Y.

FUELING COMPANIES AND COAL DEALERS

Hanna, M. A., & Co., Cleveland, O.
Lorain Coal & Dock Co., Columbus, O.

FURNACE FRONTS AND DOORS

Continental Iron Works., The,
West and Calyer Sts., Brooklyn, N. Y.

FURNACES (Boiler)

Continental Iron Works., The,
West and Calyer Sts., Brooklyn, N. Y.

FURNACE BRIDGE WALLS

Booth, W. W.,
26 Cortlandt St., New York, N. Y.

FUSES (Electrical)

General Electric Co., Schenectady, N. Y.

GAGES

Air Reduction Sales Co.,
342 Madison Ave., New York.
American Steam Gauge & Valve Mfg. Co
Camden St., Boston, Mass.
Ashton Valve Co.,
161 First St., Cambridge, Mass.

GAGE COCKS

Jerguson Gage & Valve Co.,
Winter Hill, Somerville, Mass.

GAGE GLASSES

Jerguson Gage & Valve Co.,
Winter Hill, Somerville, Mass.

GALLEY EQUIPMENT

Clad. Victor V., Co.,
217-19 S. 11th St., Philadelphia, Pa.

GASKETS

Crane Co., The,
836 S. Michigan Ave., Chicago.

GAS PRODUCERS

Air Reduction Sales Co.,
342 Madison Ave., New York.

GEARS (Marine Reduction)

DeLaval Steam Turbine Co., Trenton, N. J.

GENERAL STEEL EQUIPMENT

Bernstein Mfg. Co., Philadelphia, Pa.

GENERATORS

General Electric Co., Schenectady, N. Y.

GENERATORS (Acetylene)

Air Reduction Sales Co.,
342 Madison Ave., New York.

GLASS

Gallagher, P. J., & Son,
24 New Chambers St., New York, N. Y.

GRATE BARS (Elliptic)

Thomas Grate Bar Co., Birmingham, Ala.

GREASE

Cook's Sons, Adam,
708 Washington St., New York.
Sun Company, Finance Bldg., Philadephia, Pa.

GREASE (Launching)

Borne, Scrymser Co., 80 South St., N. Y. C.

GREASE (Shaft Alley)

Sun Company, Finance Bldg., Philadelphia, Pa.

GREASE CUPS

Lunkenheimer Co., The, Cincinnati, O.

GYPSEYS

American Engineering Co.,
Cumberland & Aramingo Sts., Philadelphia, Pa.

HARDWARE (Marine)—See MARINE HARDWARE

HATCH FASTENERS

Mullholland Hatch-Fastener Co.,
Marion Bldg., Cleveland, O.

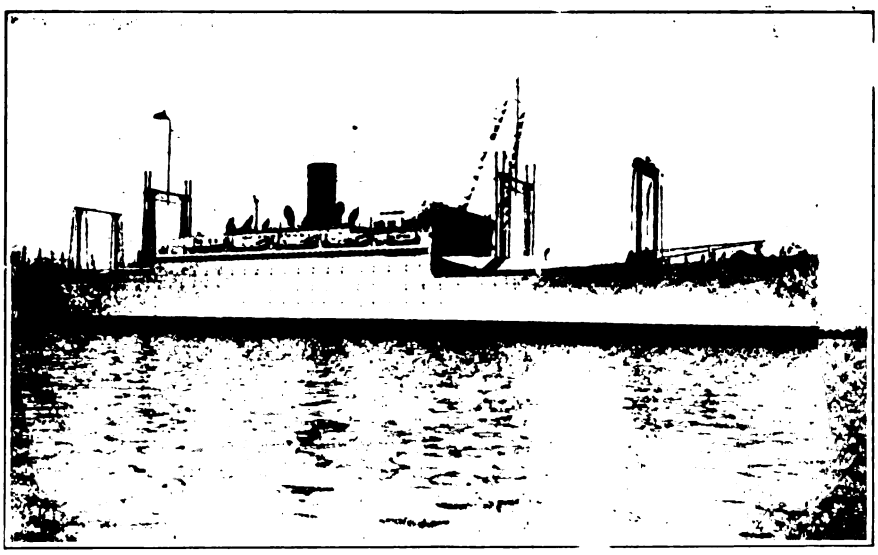
HAWSERS (Manilla)

American Manufacturing Co.,
Noble and West Sts., Brooklyn, N. Y.
Whitlock Cordage Co.,
46 South St., N. Y. C.

HEATERS AND PURIFIERS (Feed Water)

Griscom-Russell Co.,
2121 West St. Bldg., New York City

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



S. S. SOUTHERN CROSS
S. S. AMERICAN LEGION

Southern Cross

These steamers were built at the plant of the New York Shipbuilding Corporation, Camden, N. J., for the United States Shipping Board. The S. S. AMERICAN LEGION holds the record for fastest service between New York and Rio de Janeiro, 11 days, 1 hour; New York and Buenos Aires, 15 days, 17 hours; Rio de Janeiro and New York, 12 days, 16 hours.

Both the S. S. AMERICAN LEGION and S. S. SOUTHERN CROSS are of 21,000 tons displacement. They measure 535 feet overall, and have a beam of 72 feet. They are equipped with twin turbines of 12,500 H. P., which will give them a speed of 17½ knots. They have accommodations for 224 first class passengers and 194 third class passengers, in addition to a crew of 158 officers and men.

Munson Steamship Lines

Passenger Services:

New York to Brazil, Uruguay, Argentine, by Fast Full Powered Steamers of the U. S. Shipping Board:

AEOLUS, 21,000 tons displacement
AMERICAN LEGION, (new) 21,000 tons displacement
HURON, 17,000 tons displacement
SOUTHERN CROSS, (new) 21,000 tons displacement

New York to Antilla, Cuba, Munson Line American Steamer:

MUNAMAR, 7500 tons displacement
Fortnightly Service

Freight Services:

New York to Matanzas, Cardenas, Sagua, Caibarien, Nuevitas, Antilla, Gibara and Banes, Cuba.

New York to Vera Cruz, Tampico and Progreso, Mexico.

New York to Rio de Janeiro, Santos, Montevideo and Buenos Aires.

Baltimore to Havana, Cienfuegos and Santiago.

Mobile to Havana, Matanzas, Cardenas, Sagua, Caibarien, Nuevitas, Antilla, Gibara, Cienfuegos and Santiago.

Mobile to Brazilian and River Plate Ports.

New Orleans to Vera Cruz, Tampico and Progreso, Mexico.

for full particulars apply to

67 WALL STREET, NEW YORK

or the Lines' Offices at

Philadelphia, Pa. Drexel Building
Baltimore, Md. Keyser Building
Chicago, Ill. Conway Building
St. Louis, Mo. 418 Olive St.
Mobile, Ala. P. O. Box No. 20
New Orleans, La. 708 Common St.
Havana, Cuba Cuba 76 & 78
Buenos Aires, Argentine Avenida de Mayo 560.

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

HOISTING ENGINES
American Engineering Co.,
Cumberland & Aramingo Sts., Philadelphia, Pa.
Flory, S., Mfg. Co.,
95 Liberty St., New York, N. Y.
Lidgerwood Mfg. Co., 96 Liberty St., N. Y.
Mundy, J. S., Hoisting Engine Co.,
722 Frelinghuysen Ave., Newark, N. J.
Superior Iron Works Co., Superior, Wis.

HOISTING AND TRANSMISSION ROPE (Manilla)
American Manufacturing Co.,
Noble and West Sts., Brooklyn, N. Y.
Whitlock Cordage Co., New York, N. Y.

HOISTS (Air)
American Ship Building Co., Cleveland, O.
Boston & Lockport Block Co.,
124 Condor St., E. Boston, Mass.
General Electric Co., Schenectady, N. Y.
Great Lakes Engineering Works,
River Rouge, Mich.
Shepard Electric Crane & Hoist Co.,
Montour Falls, N. Y.

HOISTING EQUIPMENT (Ash)
American Engineering Co.,
Cumberland & Aramingo Sts., Philadelphia, Pa.
Lidgerwood Mfg. Co.,
96 Liberty St., New York
Mundy, J. S., Hoisting Engine Co.,
722 Frelinghuysen Ave., Newark, N. J.
Superior Iron Works Co., Superior, Wis.

HOISTS (Chain)
Shepard Electric Crane & Hoist Co.,
Montour Falls, N. Y.

HOISTS (Electric, Pneumatic, Hand)
American Engineering Co.,
Cumberland & Aramingo Sts., Philadelphia, Pa.
Lidgerwood Mfg. Co.,
96 Liberty St., New York.
Shepard Electric Crane & Hoist Co.,
Montour Falls, N. Y.
Superior Iron Works, Superior, Wis.

HOSE
United States Rubber Co.,
1790 Broadway, New York

HOSE COUPLING AND MENDERS
Victory Equip. Corp., Haydenville, Mass.

HOSE (Deck and Fire)
United States Rubber Co.,
1790 Broadway, New York.

HOSE (Pneumatic)
United States Rubber Co.,
1790 Broadway, New York.

ICE MACHINES
Brunswick Refrigerating Co.,
800-850 Jersey Ave., New Brunswick, N. J.
Kroeschell Bros Ice Machine Co., Chicago.
Whittenmeier Machinery Co.,
850 N. Spaulding Ave., Chicago, Ill.

INDICATORS
American Steam Gauge & Valve Mfg. Co
Camden St., Boston, Mass.
Walker, Thos., & Son, Ltd.,
58 Oxford St., Birmingham, Eng.

INSURANCE (Marine)
Boland & Cornelius,
1204 Prudential Bldg., Buffalo, N. Y.
Despard & Co.,
7 Hanover St., New York, N. Y.
Osborn Co., 175 W. Jackson Blvd., Chicago.
Prindiville, John, & Sons,
208 S. La Salle St., Chicago, Ill.

INTERIOR FITTINGS (Marine)
Tiebout, W. & J.,
118 Chambers St., New York.

IRON AND STEEL
La Belle Iron Works, Steubenville, O.

IRON ORE
Hanna, M. A., & Co., Cleveland, O.

JOINER EQUIPMENT
Tiebout, W. & J.,
118 Chambers St., New York.

LAMPS (Mazda and Arc)
General Electric Co., Schenectady, N. Y.

LATCHES (Ship)
Tiebout, W. & J.,
118 Chambers St., New York.

LAVATORIES
Crane Co., The,
836 S. Michigan Ave., Chicago.

LIFE BOATS, RAFTS, SUITS, PRESERVERS AND LIFE SAVING EQUIPMENT
Brauer, Justus, & Son, Inc.,
129 Arch St., Philadelphia, Pa.
Detroit Ship Bldg. Co., Detroit, Mich.
National Life Preserver Co.,
11 Broadway, New York, N. Y.
Steward Davit & Equipment Corp.,
17 Battery Place, New York City.

LIFE PRESERVERS
Brauer, Justus, & Son, Inc.,
Philadelphia, Pa.
National Life Preserver Co.,
11 Broadway, New York, N. Y.

LIGHTS (Electric)
General Electric Co., Schenectady, N. Y.

LIGHTING SETS
Matthews Engineering Co., The,
Sandusky, Ohio.

LINERS FOR CYLINDERS AND SHAFTS
Sandusky Fdy. & Machine Co., Sandusky, O.

LINSEED OIL
National Lead Co.,
111 Broadway, New York, N. Y.

LOCKERS
Bernstein Mfg. Co., Philadelphia, Pa.

LOCKS (Ship)
Tiebout, W. & J.,
118 Chambers St., New York City.

LUBRICANTS
Cook's Sons, Adam,
708 Washington St., New York.
Sun Co., Finance Bldg., Philadelphia, Pa.

LUBRICATORS
Lunkenheimer Co., The, Cincinnati, O.

LUMBER
Long Bell Lumber Co., The, Kansas City.

LUMBER (Hewn Oak)
Taylor, S. K., Lumber Co., Mobile, Ala.

LUMBER (South Carolina Pine)
Southern Pine Assn., New Orleans, La.

MACHINERY (Coal Handling)
American Hoist & Derrick Co.,
St. Paul, Minn.
Lidgerwood Mfg. Co.,
96 Liberty St., New York, N. Y.
Superior Iron Works Co., Superior, Wis.

MACHINERY (Conveying)
Lidgerwood Mfg. Co.,
96 Liberty St., New York, N. Y.

MACHINERY (Marine)
American Hoist & Derrick Co.,
St. Paul, Minn.
American Ship Building Co., Cleveland, O.
Baltimore Dry Dock & Shipbuilding Co.,
Locust Point, Baltimore, Md.
Bethlehem Shipbuilding Corp., Ltd.,
Bethlehem, Pa.
Chicago Ship Building Co., So. Chicago, Ill.
Fletcher, W. & A., Co., Hoboken, N. J.
Great Lakes Engineering Works,
River Rouge, Mich.
Kingsford Fdy. & Machine Co.,
Oswego, N. Y.
Superior Iron Works Co., Superior, Wis.
Superior Ship Building Co., Superior, Wis.
Toledo Ship Building Co., Toledo, O.

MACHINERY (Wood Boring—Pneumatic)
Keller Pneumatic Tool Co.,
Grand Haven, Mich.

MACHINISTS
American Engineering Co.,
Cumberland & Aramingo Sts., Philadelphia, Pa.
American Shipbuilding Co., Cleveland, O.
Crane's, Theo. A., Sons Co.,
Erie Basin, Brooklyn, N. Y.
Marine Iron & Shipbuilding Co.,
Duluth, Minn.
Milwaukee Dry Dock Co., Milwaukee, Wis.
Todd Shipyards Corp.,
25 Broadway, New York City.

MANIFOLDS
Victory Equipment Corp., Haydenville, Mass.

MARINE CABLEWAYS
Lidgerwood Mfg. Co.,
96 Liberty St., New York.

MARINE DECKING—See DECKING (Marine)

MARINE HARDWARE
Tiebout, W. & J.,
118 Chambers St., New York City.

MARINE LIGHTING SETS
Fairbanks, Morse & Co.,
900 S. Wabash Ave., Chicago, Ill.

MARINE OAKUM
American Manufacturing Co.,
Noble and West Sts., Brooklyn, N. Y.
Stratford, Geo., Oakum Co.,
Jersey City, N. J.

MARINE OIL—See OIL (Marine)

MARINE RAILWAYS
United States Electric Co., The,
New London, Conn.

MARINE RAILWAY BUILDERS
Crandall Engineering Co.,
102 Border St., Boston, Mass.

MARINE SUPPLIES
Carpenter, Geo. B., & Co.,
436 N. Wells St., Chicago, Ill.
Tiebout, W. J.,
118 Chambers St., New York.
Wilcox, Crittenden & Co., Middletown, Conn.

MATTRESSES, PILLOWS AND CUSHIONS
Bernstein Mfg. Co.,
3rd St. and Allegheny Ave., Philadelphia.

MATTING (Rubber)
United States Rubber Co.,
1790 Broadway, New York, N. Y.

MECHANICAL RUBBER GOODS
United States Rubber Co.,
1790 Broadway, New York, N. Y.

METALLIC PACKING
U. S. Metallic Packing Co., The,
429 North St., Philadelphia, Pa.

MILDEWPROOFING (Canvas)
Robeson Preservo Co., Port Huron, Mich.

MILLING MACHINES
Lynd-Farquhar Co.,
419 Atlantic Ave., Boston, Mass.

MOORING ENGINES
American Engineering Co.,
Cumberland & Aramingo Sts., Philadelphia, Pa.
Lidgerwood Mfg. Co., 96 Liberty St., N. Y.
Superior Iron Works Co., Superior, Wis.

Generated on 2024-08-28 00:03 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

World Wide Freight Service

AMERICAN LINE
ATLANTIC TRANSPORT LINE
LEYLAND LINE
RED STAR LINE
WHITE STAR LINE
WHITE STAR DOMINION LINE

REGULAR SAILINGS
FROM

New York	Baltimore
Boston	Norfolk
Philadelphia	Mobile
Portland, Me.	New Orleans
Montreal	Galveston
New Brunswick	

TO

London	Danzig
Liverpool	Gibraltar
Manchester	Naples
Glasgow	Genoa
Avonmouth	Southampton
Antwerp	River Plate
Hamburg	Australia and
New Zealand	

Our reputation for dependability in freight carrying, as well as in passenger service, has been won by regularity and frequency of sailings. The American Line, for instance, first to re-establish direct service to Germany after the war, has not missed a scheduled sailing since December, 1919.

Some steamer of the International Mercantile Marine Company sails nearly every day, and you can route your freight by one of our Lines with assurance of prompt loading and delivery on scheduled time.

The high classification of our steamers obtains for shippers most favorable insurance rates. Efficient handling and careful safeguarding of freight result in minimum losses.

116 Steamers—1,250,000 Tons.

INTERNATIONAL MERCANTILE MARINE COMPANY

A. C. Fetterolf, Freight Traffic Manager.
OFFICES

New York, 9-11 Broadway
Boston, 84 State St.
Montreal, McGill Bldg.
Houston, Cotton Exchange Bldg.
St. Louis, Corner 11th & Locust Sts.
Philadelphia, Bourse Bldg.
Baltimore, Chamber of Commerce
Chicago, 327 La Salle St.
Toronto, 1008 Royal Bank Bldg.
Minneapolis, Metropolitan Life Bldg.
New Orleans, Hibernia Bank Bldg.
Galveston, Cotton Exchange Bldg.
Norfolk, Flatiron Bldg.
Mobile, Mobile Liners, Mobile Ala.
Portland, Me., 1 India St.

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

MOORING MACHINES

American Engineering Co.,
Cumberland & Aramingo Sts., Philadelphia, Pa.
Chase Machine Co., The,
2313 Elm St., N. W., Cleveland, O.

MOTOR GENERATOR SETS

General Electric Co., Schenectady, N. Y.
Westinghouse Electric & Mfg. Co.,
East Pittsburgh, Pa.

MOTORS (Electric)

General Electric Co., Schenectady, N. Y.

MOTORS (Winch)

General Electric Co., Schenectady, N. Y.

NAUTICAL INSTRUMENTS

Carpenter, Geo. B., 436 N. Wells St., Chgo.
Ritchie, E. S., & Sons, Brookline, Mass.

NITROGEN

Air Reduction Sales Co.,
342 Madison Ave., New York.
Linde Air Products Co.,
30 E. 42nd St., N. Y. C.

NUTS (See Bolts and Nuts)

OAKUM

American Manufacturing Co.
Noble and West Sts., Brooklyn, N. Y.
Hooven & Allison Co., The, Xenia, Ohio.
Stratford, Geo., Oakum Co.,
165 Cornelison Ave., Jersey City, N. J.
Wilcox, Crittenden & Co., Middletown, Conn.

OIL BURNING EQUIPMENT

Bethlehem Shipbuilding Corp., Ltd.,
Bethlehem, Pa.

OIL CUPS

Cook's Sons, Adam,
708 Washington St., New York
Lunkenheimer Co., The, Cincinnati, O.

OIL (Marine)

Borne, Scrymser Co.,
80 South St., New York City
Sun Company,
Finance Bldg., Philadelphia, Pa.

OILS (Turbine)

Sun Company,
Finance Bldg., Philadelphia, Pa.

OPEN SIDE PLANER SHAPER

Lynd-Farquhar Co.,
419 Atlantic Ave., Boston, Mass.

OXY-ACETYLENE WELDING AND CUTTING—See WELDING AND CUTTING APPARATUS AND SUPPLIES (Oxy-Acetylene Process)

OXY-ACETYLENE

Air Reduction Sales Co.,
342 Madison Ave., New York.
Linde Air Products Co.,
30 E. 42nd St., N. Y. C.

OXYGEN IN CYLINDERS

Air Reduction Sales Co.,
342 Madison Ave., New York.
Linde Air Products Co.,
30 E. 42nd St., N. Y. C.

PACKING

Crane Co., The, 836 S. Michigan Ave., Chgo.
U. S. Metallic Packing Co., The, Phila.
United States Rubber Co.,
1790 Broadway, New York
Wilcox, Crittenden & Co.,
Middletown, Conn.

PACKING (Asbestos)

United States Rubber Co.,
1790 Broadway, New York, N. Y.

PACKING (Metallic)—See METALLIC PACKING

PACKING (Tarred and Untarred Jute)

American Manufacturing Co.,
Noble and West Sts., Brooklyn, N. Y.
Stratford, Geo., Oakum Co.,
Jersey City, N. J.

PAINTS (Acid Proof)

Otello & Bitmo Corp., The,
23 Park Place, New York, N. Y.

PAINT (Canvas)

Robeson Preservo Co., Port Huron, Mich.

PAINT (For Iron and Steel)

National Lead Co.,
111 Broadway, New York, N. Y.

PAINT (Marine)

Marine Decking & Supply Co.,
1011 Chestnut St., Philadelphia, Pa.
National Lead Co.,
111 Broadway, New York, N. Y.
Natroco Paint & Varnish Works,
Tonawanda, N. Y.
New Jerseyy Paint Works,
Harry Louderbough, Inc.,
Wayne & Fremont Sts., Jersey City, N. J.
Otello & Bitmo Corp., The,
23 Park Place, New York, N. Y.

PAINT (Woodwork)

National Lead Co.,
111 Broadway, New York, N. Y.

PANELS (Wood)

Long Bell Lumber Co., The,
Kansas City, Mo.

PASSENGER SERVICE

International Mercantile Marine Co.,
9 Broadway, New York, N. Y.
Munson Steamship Co.,
67 Wall St., New York, N. Y.
U. S. Shipping Board, Washington, D. C.

PATENTS

Siggers & Siggers, Washington, D. C.

PIG IRON

Hanna, M. A., & Co., Cleveland, O.

PILE DRIVERS

Lidgerwood Mfg. Co.,
96 Liberty St., New York.

PILING (Creosoted)

Long Bell Lumber Co., The,
Kansas City, Mo.

PIPE BENDING MACHINERY—See MACHINERY (Pipe Bending)

PIPE AND BOILER COVERINGS (Asbestos)

American Insulation Co.,
Roberts Ave. & Stokley St., Philadelphia, Pa.

PIPE FITTINGS (Steel, Iron and Brass)

Crane Co., The,
836 S. Michigan Ave., Chicago, Ill.

PIPE (Iron and Steel)

Continental Iron Works, The,
West and Calyer Sts., Brooklyn, N. Y.

PIPE (Lead)

National Lead Co.,
111 Broadway, New York, N. Y.

PITCH

National Rosin, Oil & Size Co.,
90 West St., New York City.

PLANERS

Lynd-Farquhar Co.,
419 Atlantic Ave., Boston, Mass.

PLASTER FIBRE

Stratford, Geo., Oakum Co.,
Jersey City, N. J.

PLATES (Floor)

American Pressed Steel Co., Philadelphia, Pa.

PLUMBERS' OAKUM

American Mfg. Co.,
Noble and West Sts., Brooklyn, N. Y.
Stratford, Geo., Oakum Co.,
Jersey City, N. J.

PLUMBING (Marine)

Crane Co., The,
836 S. Michigan Ave., Chicago.

PLYWOOD

Haskelite Mfg. Corp.,
Chamber of Commerce Bldg., Chicago, Ill.

PLUMBING SUPPLIES (Rubber)

United States Rubber Co.,
1790 Broadway, New York, N. Y.

PNEUMATIC TOOLS

Keller Pneumatic Tool Co.,
Grand Haven, Mich.
Oldham, Geo., & Son, Co.,
Scott and McHenry Sts., Baltimore, Md.

POLISH (Metal and Wood)

Diamond Polish Co., Washington, Pa.

POLES

Mercantile Specialties Corp.,
11 Broadway, New York, N. Y.

PORTHOLE RUBBERS

United States Rubber Co.,
1790 Broadway, New York, N. Y.

PRESSES

Lynd-Farquhar Co.,
419 Atlantic Ave., Boston, Mass.

PRESSURE REGULATORS

Crane Co., The,
836 S. Michigan Ave., Chicago, Ill.

PROJECTORS (Electric Flood Light)

General Electric Co., Schenectady, N. Y.

PROOFINGS (Canvas)

Robeson Preservo Co., Port Huron, Mich.

PROPELLER BLADES

Sheriffs Mfg. Co., Milwaukee, Wis.

PROPELLER HUBS

Sheriffs Mfg. Co., Milwaukee, Wis.

PROPELLER SHAFT SLEEVES

Sandusky Fdy. & Machine Co.,
Sandusky, Ohio.

PROPELLER WHEELS

American Ship Building Co., Cleveland, O.
Atlas Steel Casting Co., Buffalo, N. Y.
Baltimore Dry Dock & Shipbuilding Co.,
Locust Point, Baltimore, Md.
Detroit Ship Building Co., Detroit, Mich.
Great Lakes Engineering Works,
River Rouge, Mich.
Milwaukee Dry Dock Co., Milwaukee, Wis.
Sheriffs Mfg. Co., Milwaukee, Wis.
Superior Ship Bldg., Superior, Wis.
Toledo Ship Building Co., Toledo, O.
Trout, H. G., Co.,
King Iron Works, Buffalo, N. Y.

PROPELLERS

Bethlehem Shipbuilding Corp., Ltd.,
Bethlehem, Pa.
Hyde Windlass Co., Water St., Bath, Me.

PROTECTIVE COATINGS

National Lead Co.,
111 Broadway, New York, N. Y.

PUMPS

Boston & Lockport Block Co.,
E. Boston, Mass.
Bethlehem Shipbuilding Corp., Ltd.,
Bethlehem, Pa.
DeLaval Steam Turbine Co., Trenton, N. J.
Great Lakes Engineering Works,
River Rouge, Mich.
Kingsford Fdy. & Machine Works,
Oswego, N. Y.
National Transit Pump & Machine Co.,
Oil City, Pa.

PUMPS (Boiler Feed)

Fairbanks, Morse & Co.,
900 S. Wabash Ave., Chicago, Ill.
National Transit Pump & Machine Co.,
Oil City, Pa.

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

CRANE'S
SHIPYARD
AND
DRYDOCKS

Erie Basin, Breakwater Gap,
BROOKLYN, N. Y.

Turbine, Reciprocating Engine, Boiler and Hull Repairs

CAPACITY OF DRYDOCKS

No. 1	2,500	Gross	Tons	250	Feet
No. 2	5,500	"	"	380	"
No. 3	900	"	"	200	"
No. 4	11,000	"	"	500	"

(Number Four Dock Now Building)
(Ready for Operation October 1, 1921)

Machine, Boiler, Blacksmith and Carpenter Shops
Plate and Angle Furnaces

THEO. A. CRANE'S SONS CO.

Established 1867

Telephone - - - - Henry 3000
Night Phone - - - Midwood 3474

ERIE BASIN **BROOKLYN, N. Y.**

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

PUMPS (Circulating)
National Transit Pump & Machine Co.,
Oil City, Pa.

PUMPS (Diaphragm)
Boston & Lockport Block Co.,
123 Condor St., E. Boston, Mass.

PURIFICATION SYSTEMS—See WATER PURIFICATION SYSTEMS

PYROMETERS
The Superheater Co.,
17 E. 42nd St., New York City.

RADIO EQUIPMENT
Radio Corporation of America,
Woolworth Bldg., New York City

RAFTS
Detroit Shipbuilding Co., Detroit, Mich.
Lane, C. M., Life Boat Co.,
250 Huron St., Brooklyn, N. Y.

RAILWAY DRY DOCKS
Crandall Engineering Co., The,
102 Border St., Boston, Mass.

RANGES (Cooking)
Clad, Victor V., Co.,
217-19 S. 11th St., Philadelphia, Pa.

RED LEAD
National Lead Co.,
111 Broadway, New York, N. Y.

REFRIGERATING MACHINERY
Brunswick Refrigerating Co.,
800-850 Jersey Ave., New Brunswick, N. J.
Great Lakes Engineering Works,
River Rouge, Mich.
Kroeschell Bros. Ice Machine Co., Chicago.
Wittenmeier Machinery Co.,
850 N. Spaulding Ave., Chicago, Ill.

RELEASING HOOK—See HOOKS (Releasing)

REPAIRS (Marine)
American Ship Building Co., Cleveland, O.
Baltimore Dry Dock & Shipbuilding Co.,
Locust Point, Baltimore, Md.
Bath Iron Works, Bath, Me.
Bethlehem Shipbuilding Corp., Ltd.,
Bethlehem, Pa.
Buffalo Dry Dock Co., Buffalo, N. Y.
Chicago Ship Building Co., So. Chicago, Ill.
Commercial Boiler Works, The,
Seattle, Wash.
Crane's, Theo. A., Sons Co.,
Erie Basin, Brooklyn, N. Y.
Fletcher, W. & A., Co., Hoboken, N. J.
Great Lakes Engineering Works,
River Rouge, Mich.
Marine Iron & Shipbuilding Co.,
Duluth, Minn.
Superior Ship Bldg. Co., Superior, Wis.
Todd Shipyards Corp.,
25 Broadway, New York City.
Toledo Ship Bldg. Co., Toledo, O.
United States Electric Co., The,
New London, Conn.

RIGGING
Baltimore Dry Dock & Shipbuilding Co.,
Locust Point, Baltimore, Md.

RIVET HEATER (Electric)
United States Electric Co., The,
New London, Conn.

RIVETS
Oliver Iron & Steel Co.,
10th and Muriel Sts., Pittsburgh, Pa.

RIVETS (Boiler)—See BOILER RIVETS

RIVETS (Ship)
Great Lakes Engineering Works,
River Rouge, Mich.

RIVETS (Structural)
Pittsburgh Rivet Co.,
38th St. & B. & O. Junction R. R.,
Pittsburgh, Pa.

RIVETING HAMMERS (Pneumatic)
Keller Pneumatic Tool Co.,
Grand Haven, Mich.
Oldham, Geo., & Son, Co.,
Scott and McHenry Sts.. Baltimore, Md.

RIVET SETS (Pneumatic)
Oldham, Geo., & Son, Co.,
Scott and McHenry Sts., Baltimore, Md.

ROPE (Manilla)
Hooven & Allison Co., The, Xenia, Ohio.

ROPE (Manila, Net, Sisal and Other Hard Fiber Cordage)
Ajax Rope Co., Inc.,
Singer Bldg., 149 Broadway, New York.
American Manufacturing Co.,
Noble and West Sts., Brooklyn, N. Y.
Whitlock Cordage Co.,
46 South St., New York City.

ROPE (Transmission)
American Manufacturing Co.,
Noble and West St., Brooklyn, N. Y.
Whitlock Cordage Co.,
46 South St., New York City.

ROPE (Wire)—See WIRE ROPE

ROPE AND TWINE
American Manufacturing Co.,
Noble and West Sts., Brooklyn, N. Y.

ROPE DRIVES AND TRAMWAYS
Whitlock Cordage Co.,
46 South St., New York City.

ROPE OAKUM
Stratford, Geo., Oakum Co.,
Jersey City, N. J.

SCHOONERS (Auxiliary)
American Ship Building Co., Cleveland, O.
Baltimore Dry Dock & Shipbuilding Co.,
Locust Point, Baltimore, Md.
Buffalo Dry Dock Co., Buffalo, N. Y.
Chicago Ship Building Co., So. Chicago, Ill.
Milwaukee Dry Dock Co., Milwaukee, Wis.
Todd Shipyards Corp.,
25 Broadway, New York City.
Toledo Ship Building Co., Toledo, O.

SCOW WINDING MACHINERY
Superior Iron Works Co., Superior, Wis.

SEARCHLIGHTS (Incandescent and Arc)
General Electric Co., Schenectady, N. Y.

SECOND HAND MACHINERY—See MACHINERY, SECOND HAND

SEPARATORS (Steam, Oil and Water)
Crane Co., The,
836 S. Michigan Ave., Chicago.
Griscom-Russell Co.,
2121 West St. Bldg., New York City.

SHAFT SLEEVES
Sandusky Fdy. & Machine Co.,
Sandusky, Ohio.

SHAPERS
Lynd-Farquhar Co.,
419 Atlantic Ave., Boston, Mass.

SHIPBUILDERS
American Ship Building Co., Cleveland, O.
Baltimore Dry Dock & Shipbuilding Co.,
Locust Point, Baltimore, Md.
Bath Iron Works, Ltd., Bath, Me.
Bethlehem Shipbuilding Corp.,
Bethlehem, Pa.
Fletcher, W. & A., Co., Hoboken, N. J.
Great Lakes Engineering Works,
River Rouge, Mich.
Los Angeles Shipbuilding & Dry Dock Co.,
San Pedro, Cal.
Marine Iron & Shipbuilding Co.,
Duluth, Minn.
Newport News Shipbuilding & Dry Dock Co.,
Woolworth Bldg., New York, N. Y.
New York Shipbuilding Corp.,
120 Broadway, New York, N. Y.
Todd Shipyards Corp.,
25 Broadway, New York City.
Toledo Ship Building Co., Toledo, O.

SHIPBUILDING LUMBER AND TIMBERS
Long Bell Lumber Co., The,
Kansas City, Mo.
Southern Pine Assn., New Orleans, La.

SHIPBUILDING SYSTEM
Isherwood, J. W.,
17 Battery Place, New York City.

SHIP REPAIRS
Standard Shipbuilding Corp.,
Shooters Island, New York.

SHIP RIVETS—See RIVETS (Ship)

SHIPPING AGENTS
New York Maritime Service, Inc.,
113 Broad St., New York City.
Van Krieken, H. & Co., Rotterdam, Holland.

SHIPWRIGHTS
Crane's, Theo. A.,, Sons Co.,
Erie Basin, Brooklyn, N. Y.

SHIPYARDS
Crane's, Theo. A.,, Sons Co.,
Erie Basin, Brooklyn, N. Y.

SOLDER
National Lead Co.,
111 Broadway, New York, N. Y.

SPARS (Rough or Finished)
Southern Pine Assn., New Orleans, La.

SPECIALTIES (Steam)
Crane Co., The,
836 S. Michigan Ave., Chicago.
Lunkenheimer Co., The, Cincinnati, O.

SPUN OAKUM
Stratford, Geo., Oakum Co., Jersey City, N. J.

STAIR TREADS (Rubber)
United States Rubber Co.,
1790 Broadway, New York, N. Y.

STEAMSHIP LINES (Passenger and Freight European)
American Line, 9 Broadway, New York City.
Munson Steamship Co.,
67 Wall St., New York, N. Y.

STEARINE (Launching)
Borne, Schrymser Co.,
80 South St., New York City.

STEEL (Open Hearth)
Atlas Steel Casting Co., Buffalo, N. Y.

STEEL BARGES
American Bridge Co.,
30 Church St., New York, N. Y.

STEEL EQUIPMENT (General)
Bernstein Mfg. Co.,
3rd St. and Allegheny Ave., Philadelphia.

STEEL PLATE WORK
Bridgeport Boiler Works, The,
Housatonic St., Bridgeport, Conn.

STEEL TANKS
Kroeschell Bros. Ice Machine Co.,
Chicago, Ill.

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

UNITED MARINE AND FUEL CORPORATION
113 BROAD ST., NEW YORK

BITUMINOUS COAL

DOMESTIC—EXPORT

Petroleum and Petroleum Products

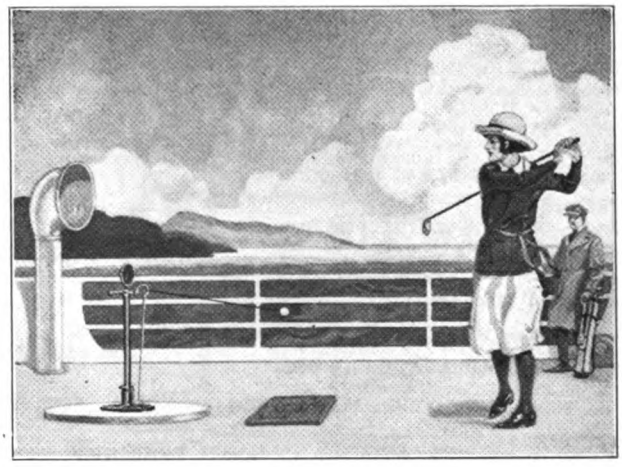
UNITED MARINE & FUEL CORPORATION

113 BROAD STREET
New York

Bowling Green 2751-2-3

Cable Address: UNMARFUEL

New York Agents
PENN-OKLA. OIL CORPORATION



Provide shipboard golf for your passengers

Golfers—when taking an ocean voyage—can now keep up their game on shipboard—and actually *improve* their playing enroute. The Craig Golfmeter provides the necessary practice. The Craig Golfmeter also enables passengers to play 18-hole courses of shipboard golf, with tournaments and prizes.

Still a novelty—but a proven entertainer. Now installed on board ships of the Pacific Mail Steamship Co., Matson Navigation Co., Toyo Kisen Kaisha and Admiral Line.

The Craig Golfmeter

occupies little space—only 11x16 feet—and requires little attention. Easily set up by the deck steward. Consists of heavy base and strong upright, to which is secured an aeroplane wire cable and a captive golf ball. Each stroke causes ball and cable to revolve (not wind) rapidly until force of stroke is spent. An accurate dial registers the length in yards of every shot. Clean hits are easily distinguished from tops or slices by motion of ball.

The Golfmeter is fitted with the finest ball bearings, beautifully nickeled, and built to last a lifetime. Passengers flock to play on it. Enlivens days at sea as few other diversions can. No well-equipped passenger vessel should be without one.

Now being sold and demonstrated at leading golf shops, or address our nearest office.

Craig Golfmeter Co.

590 Howard St.
San Francisco

51 East 42nd St.
New York City

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

STEERING ENGINES
Hyde Windlass Co., Water St., Bath, Me.
Lidgerwood Mfg. Co.,
Mundy, J. S., Hoisting Engine Co.,
722 Frelinghuysen Ave., Newark, N. J.
96 Liberty St., New York.
Superior Iron Works Co., Superior, Wis.

STEERING GEARS
American Engineering Co., Philadelphia, Pa.
American Ship Building Co., Cleveland, O.
Bethlehem Shipbuilding Corp., Ltd., Bethlehem, Pa.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
Superior Iron Works Co., Superior, Wis.

STERILIZING APPARATUS (Water)
Griscom-Russell Co., 2121 West St. Bldg., New York City.

STEVEDORES
East River Stevedoring Corp., 39 Broadway, New York, N. Y.

STOKERS
Babcock & Wilcox Co., 85 Liberty St., New York.

STRUCTURAL RIVETS — See RIVETS (Structural)

SUPERHEATERS (Marine)
Babcock & Wilcox Co., 85 Liberty St., New York.
Power Specialty Co., 111 Broadway, New York City.
The Superheater Co., 17 E. 42nd St., New York City.

SWITCHBOARDS
General Electric Co., Schenectady, N. Y.

TANK RIVETS—See RIVETS (Tank)

TANKS
Bridgeport Boiler Works, The, Housatonic St., Bridgeport, Conn.

TANKS (Acetylene)
Linde Air Products Co., 30 E. 42nd St., New York City.
Prest-O-Lite Co., Inc., 30 E. 42nd St., New York City.

TANKS (Riveted)
Bath Iron Works, Bath, Me.
Lake Erie Boiler Works, Buffalo, N. Y.

TANKS (Welded Steel)
Continental Iron Works, The, West and Calyer Sts., Brooklyn, N. Y.

TARRED ROPE OAKUM
Stratford, Geo., Oakum Co., Jersey City, N. J.

TELEMOTORS (Electric)
American Engineering Co., Philadelphia, Pa.

TELEMOTORS (Hydraulic)
American Engineering Co., Cumberland & Aramingo Sts., Philadelphia, Pa.
Mundy, J. S., Hoisting Engine Co., 722 Frelinghuysen Ave., Newark, N. J.

TICKETS FOR EUROPE
International Mercantile Marine Co., 9 Broadway, New York.

TIMBERS (For Planking, Keelson, Decking)
Long Bell Lumber Co., The, Kansas City, Mo.

TORCHES, BURNERS, AND BRAZING OUTFITS (Acetylene, Blow, Oxy-Acetylene)
Air Reduction Sales Co., 342 Madison Ave., New York.
Penberthy Injector Co., Detroit, Mich.

TORCHES (Welding and Cutting)
Air Reduction Sales Co., 342 Madison Ave., New York.

TOWING CABLES
American Manufacturing Co., Noble and West Sts., Brooklyn, N. Y.

TOWING LINES (Manila)
American Manufacturing Co., Noble and West Sts., Brooklyn, N. Y.
Whitlock Cordage Co., 46 South St., New York City.

TOWING LINES (Wire)
Hobbs, Clinton E., Co., Boston, Mass.

TOWING MACHINES
American Engrg. Co., Philadelphia, Pa.
Lidgerwood Mfg. Co., 96 Liberty St., New York.

TRANSMISSION (Rope)—See ROPE (Transmission)

TRAPS (Steam, Air, Vacuum)
Crane Co., The, 836 S. Michigan Ave., Chicago, Ill.

TROLLEYS
Shepard Electric Crane & Hoist Co., Montour Falls, N. Y.

TUBING (Brass and Copper)
Scovill Mfg. Co., Waterbury, Conn.

TURBINES
Fletcher, W. & A., Co., 12th to 14th St., Hoboken, N. J.
Sun Co., Finance Bldg., Philadelphia, Pa.

TURBINES (Electrical)
General Electric Co., Schenectady, N. Y.

TURBINES (Marine)
Bethlehem Shipbuilding Corp., Ltd., Bethlehem, Pa.

TURBINES (Steam)
Delaval Steam Turbine Co., Trenton, N. J.

UNIONS
Crane Co., The, 836 S. Michigan Ave., Chicago, Ill.

UNTARRED ROPE OAKUM
Stratford, Geo., Oakum Co., Jersey City, N. J.

VALVES
Jerguson Gage & Valve Co., Winter Hill, Somerville, Mass.

VALVES AND FITTINGS
Ashton Valve Co., 161 First St., Cambridge, Mass.
Bethlehem Shipbuilding Corp., Ltd., Bethlehem, Pa.
Crane Co., The, 836 S. Michigan Ave., Chicago, Ill.
Lunkenheimer Co., The, Cincinnati, O.
Penberthy Injector Co., Detroit, Mich.
Powell, Wm., The, Spring Grove Ave., Cincinnati, O.
Scully Steel & Iron Co., Chicago, Ill.

VALVES (Condenser, Pump, Rubber)
United States Rubber Co., 1790 Broadway, New York.

VALVES (Rubber Pump)
United States Rubber Co., 1790 Broadway, New York, N. Y.

WALKAWAY GRATINGS—See GRATINGS (for Floors, Walkaways, etc.)

WASHERS (Iron and Steel)
Frank Henry, Jr., 347 Hudson St., New York City.

WATER GAGES
Jerguson Gage & Valve Co., Winter Hill, Somerville, Mass.

WATER PURIFICATION SYSTEMS
Griscom-Russell Co., 2121 West St. Bldg., New York City.

WATERPROOFING CANVAS
Robeson Preservo Co., Port Huron, Mich.

WELDING (Custom)
Linde Air Products Co., 42nd St. Bldg., New York City.
Oxweld Acetylene Co., Newark, N. J.

WELDING AND CUTTING APPARATUS AND SUPPLIES (Oxy-Acetylene Process)
Air Reduction Sales Co., 342 Madison Ave., New York.
Prest-O-Lite Co., Inc., 30 E. 42nd St., New York City.

WELDING GLASSES
Air Reduction Sales Co., 342 Madison Ave., New York.

WELDING RODS
Air Reduction Sales Co., 342 Madison Ave., New York.
Prest-O-Lite Co., Inc., 30 E. 42nd St., New York City.

WHISTLES
Crane Co., The, 836 S. Michigan Ave., Chicago.
Lunkenheimer Co., The, Cincinnati, O.

WHITE LEAD
National Lead Co., 111 Broadway, New York, N. Y.

WINCHES
American Engineering Co., Philadelphia, Pa.
Bethlehem Shipbuiding Corp., Ltd., Bethlehem, Pa.
Flory, S., Mfg. Co., 95 Liberty St., New York.
Hadfield-Penfield Steel Co., The, Bucyrus, Ohio.
Hyde Windlass Co., Water St., Bath, Me.
Lidgerwood Mfg. Co., 96 Liberty St., New York City.
Mundy, J. S., Hoisting Engine Co., 722 Frelinghuysen Ave., Newark, N. J.
Shepard Electric Crane & Hoist Co., Montour Falls, N. Y.
Superior Iron Works, Superior, Wis.

WINDLASSES
American Engineering Co., Philadelphia, Pa.
American Ship Building Co., Cleveland, O.
Bethlehem Shipbuilding Corp., Ltd., Bethlehem, Pa.
Carpenter, Geo. B., & Co., 436 N. Wells, Chicago.
Flory, S., Mfg. Co., 95 Liberty St., New York.
Hadfield Penfield Steel Co., The, Bucyrus, O.
Hyde Windlass Co., Water St., Bath, Me.
Lidgerwood Mfg. Co., 96 Liberty St., New York.
Mundy, J. S., Hoisting Engine Co., 722 Frelinghuysen Ave., Newark, N. J.
Superior Iron Works, Superior, Wis.
Wilcox, Crittenden & Co., Middletown, Conn.

WIRE AND CABLES (Electrical)
United States Rubber Co., 1790 Broadway, New York, N. Y.

WIRE AND WIRING DEVICES
General Electric Co., Schenectady, N. Y.

WIRE ROPE
Ajax Rope Co., Inc., Singer Bldg., 149 Broadway, New York.
Durable Wire Rope Co., 93 Pearl St., Boston, Mass.

WIRELESS SETS AND APPARATUS
Radio Corp. of America, Woolworth Bldg., New York City.

WOOD BORING MACHINES—See MACHINERY (Wood Boring Pneumatic)

WRENCHES
Coes Wrench Co., Worcester, Mass.

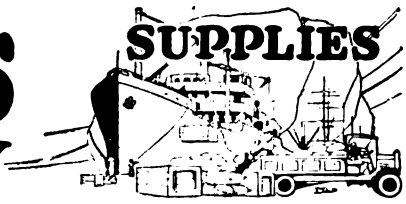
YACHT BUILDERS
Lake Erie Dry Dock & Mill Co., Sandusky, O.

YACHT ROPE
American Manufacturing Co., Noble and West Sts., Brooklyn, N. Y.
Whitlock Cordage Co., 46 South St., New York City.

YARN (Lath, Fodder)
American Manufacturing Co., Noble and West Sts., Brooklyn, N. Y.

Generated on 2024-08-28 00:03 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

SHIPS PORT DIRECTORY



—BALTIMORE—

Coal
CORY-MANN GEORGE CORP.
Baltimore, Md.
Cable: "Coreman"

Coal for Bunkers
TOWNSEND BLAKE
149 Broadway
New York, N. Y. Cable "Townblake"

—CHARLESTON—

Coal for Bunkers
TOWNSEND BLAKE
149 Broadway
New York, N. Y. Cable "Townblake"

—FERNANDINA—

Coal
JEWETT, BIGELOW & BROOKS
Fernandina,
Fla.

—HAMPTON ROADS—

Coal for Bunkers
TOWNSEND BLAKE
149 Broadway
New York, N. Y. Cable "Townblake"

—MOBILE—

Coal for Bunkers
TOWNSEND BLAKE
149 Broadway
New York, N. Y. Cable "Townblake"

—NEW ORLEANS—

Coal for Bunkers
TOWNSEND BLAKE
149 Broadway
New York, N. Y. Cable "Townblake"

—NEW YORK—

Coal
COMMERCIAL COAL CO., INC.
11 Broadway, New York. Bunkering Facilities. Atlantic, Gulf & Pacific Coast ports. Cable:—"Comcoal"

—NEW YORK—

Coal
CORY-MANN GEORGE CORP.
26-28 Beaver Street
New York, N. Y. Cable: "Coreman"

Coal
Hartwell-Lester Coal Export Corp.
Tribune Building, New York, N. Y.
Cable: "Wellhart"

Coal
LEDIARD & COMPANY, INC.
17 Battery Place, New York, N. Y.
Cable: "Lediard", N. Y.

Coal
UNITED MARINE & FUEL CORP.
113 Broad Street, New York, N. Y.
Bowling Green 2751 Cable: "Unmarfuel"

Coal for Bunkers
TOWNSEND BLAKE
149 Broadway
New York, N. Y. Cable "Townblake"

Forwarding & Insurance
A. O. WOLGAST,
59 Pearl St., New York, N. Y.
Cable: "Gastwol" Broad 6676-3139

Forwarding & Warehouse
Williams Shipping Agency, Inc.
59 Pearl St., New York, N. Y.
Broad 622

Freight Forwarding
National Shipping Co. Inc.,
24 Stone St., New York City
Cable: Nashico Phone: Broad 1452

Glass
P. J. GALLAGHER & SON
24 New Chambers St.
New York City 1031-1032 Beekman

Insurance Broker
Despard & Co.,
7 Hanover St, New York City
Cable: Despard Phone: Hanover 5775

Life Preservers
NATIONAL LIFE PRESERVER CO.
"Ever-Warm Safety-Suit"
11 Broadway, New York, N. Y.
Tel: Bowling Green 8609-8775

—NEW YORK—

Paint
NEW JERSEY PAINT WORKS
Harry Louderbough, Inc.
Wayne & Fremont Sts.
Jersey City, N. J. Montgomery 165 and 166

Pitch
National Rosin, Oil & Size Co.
90 West Street
New York, N. Y. Rector 8860

Stevedore
East River Stevedoring Corp.
39 Broadway, New York, N. Y.
Whitehall 780

Shipping Agents
New York Maritime Service, Inc.
113 Broad Street
New York, N. Y. Bowling Green 2751

Steamship Agents—Brokers—Operators
KIRK & TREENE, INC.
80 South St.

—NORFOLK—

Coal
CORY-MANN GEORGE CORP.
Norfolk, Va.
Cable: "Coreman"

—PENSACOLA—

Coal for Bunkers
TOWNSEND BLAKE
149 Broadway
New York, N. Y. Cable "Townblake"

—PHILADELPHIA—

Coal
CORY-MANN GEORGE CORP.
Philadelphia, Pa.
Cable: "Coreman"

Coal for Bunkers
TOWNSEND BLAKE
149 Broadway
New York, N. Y. Cable "Townblake"

Generated on 2024-08-28 00:03 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Speed
is all important in making ship repairs NOW

The busy season demands rush work—and we are on the job *early* to answer your calls. We specialize expeditious work, and you will find us as prompt as our word.

Altho our work is done *quickly*, it is done *right*, and we *guarantee* you satisfaction.

Marine Repairs of all kinds—acetylene and electric welding, boiler repairs, hull repairs, tank top work, and bilge plate work. Steel on hand to meet any job.

Telephones
Melrose 735-736 and 737

For Night and Sunday Calls
John Geistman, Mgr.
Melrose 4524
John Abernethy, Supt.
Melrose 2770

Marine Iron & Shipbuilding Co.
Duluth, Minnesota

MARINE DEPARTMENT
of
American Bridge Company
FRICK BUILDING PITTSBURGH, PENNA.

BUILDERS OF
STEEL BARGES
for RIVERS and HARBORS

CAR-FLOATS

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

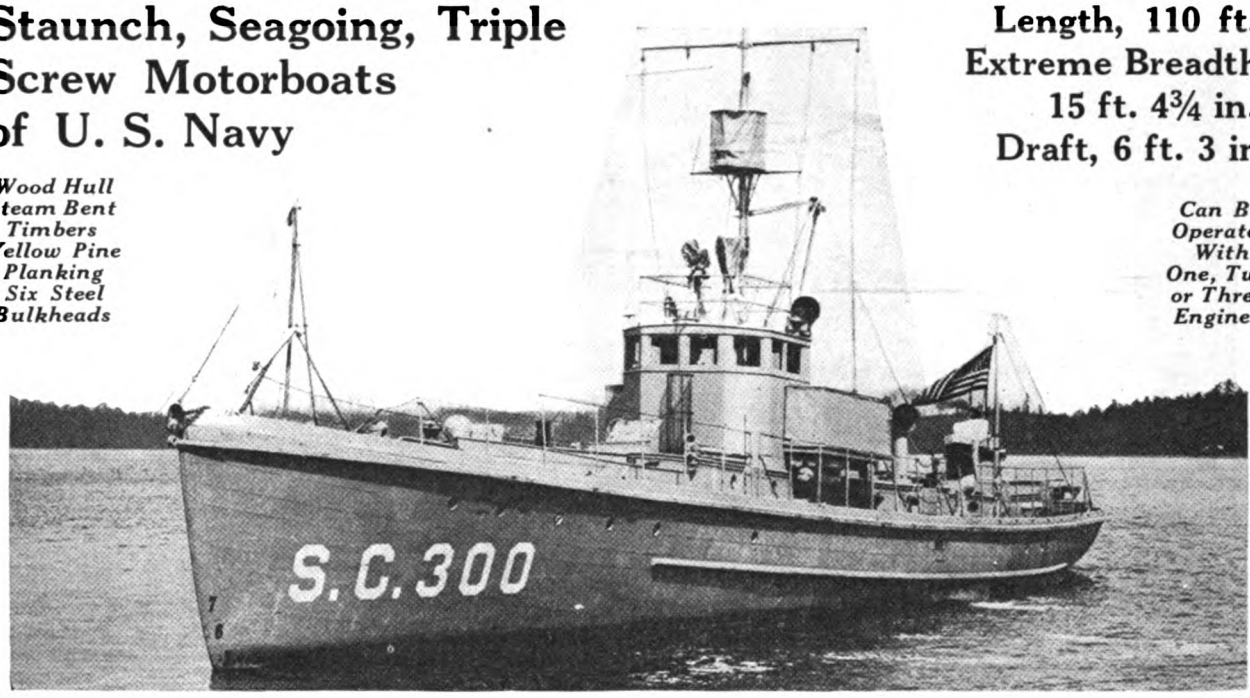
Want a Boat? *Here's Your Chance!*

Staunch, Seagoing, Triple Screw Motorboats of U. S. Navy

Length, 110 ft.; Extreme Breadth, 15 ft. 4¾ in.; Draft, 6 ft. 3 in.

Wood Hull Steam Bent Timbers Yellow Pine Planking Six Steel Bulkheads

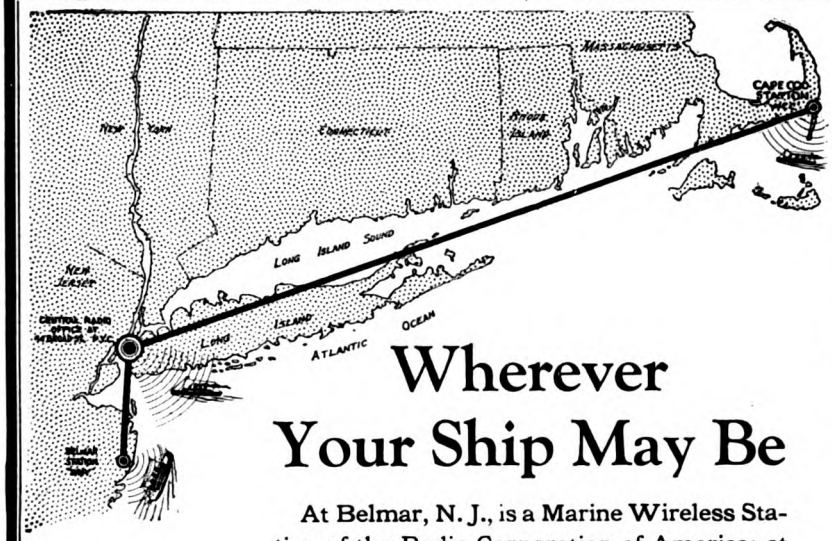
Can Be Operated With One, Two or Three Engines



Equipped with Three Six-Cylinder, Standard Gasolene Engines, 220 H.P. each, reversible, air starting, also 4½ K.W. Electric Set. Speed 18 knots, make first class Yachts, Patrol Boats, Tenders Pleasure or for Commercial Purposes

Apply to HENRY A. HITNER'S SONS CO.

Cable Address, "Hitner," Phila. **4501 RICHMOND STREET, PHILADELPHIA, PENNA., U. S. A.**



Wherever Your Ship May Be

At Belmar, N. J., is a Marine Wireless Station of the Radio Corporation of America; at Cape Cod, another. Private wires run from the Marine Service Bureau at New York, the heart of the system, to the stations at Belmar and Cape Cod.

Telephone your ship message to the Marine Service Bureau of the Radio Corporation of America at 64 Broad Street ("Broad 5100"), and the Bureau transmits it to your ship from Belmar or Cape Cod. The Marine Service Bureau is always open and will gladly indicate the best route for prompt transmission and the rate.

Mark your message *"Via RCA"* to insure

ACCURACY SPEED ECONOMY

A copy of our marine radio map and a schedule of rates will be sent on request.

Radio Corporation of America

WORLD WIDE WIRELESS

Edward J. Nally, President

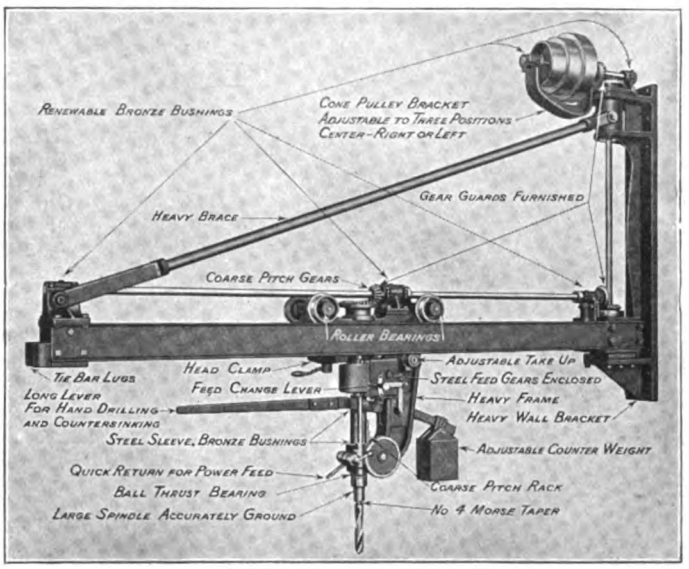
Dept. M, 233 Broadway, New York

BRANCH OFFICES IN THE U. S. A.:

Boston	Philadelphia	Baltimore	Norfolk	Savannah
New Orleans	Galveston	Port Arthur	Cleveland	Chicago
Seattle	Portland	San Francisco	San Pedro	Honolulu

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

PUT A HOLE IN YOUR DRILLING COSTS



With this WALL RADIAL DRILL. The materials and workmanship entering into the construction, give long life to the machine, insuring continuous service, and no shut downs for repairs. All control centralized within easy reach of the operator is a big item in time saving, and the production is so much increased that your operating costs will be cut to a minimum.

Descriptive bulletin will interest you.

Get it NOW

LYND-FARQUHAR COMPANY

DEPT. "M" ***Machine Tools of Quality*** **BOSTON 9, MASS.**

Why you should use U.S.E. Co. Electric Rivet Heaters

1. Production of hot rivets in a few seconds.
2. No lost time in starting forge.
3. Eliminates the breaking and carrying of coke, coal and fuel oil to the forges (as by the old method).
4. Rivets heated from the inside, giving uniformity of heat.
5. Minimum in lost and burnt rivets.
6. Heats the rivets free from scale.
7. Current used only, when heating rivets, giving greater economy.
8. Heats rivets to 6" in length without adjustment.
9. Forges are air-cooled,—Adjustable, Bridge to take any length Rivet.
10. Clean and cool, no smoke, ashes or gases, less heat radiation.
11. Production of heated rivets, 100 lbs. per hour.
12. The forge is portable, supplied with wheels and eyebolts so that it is easily moved, or carried by crane.
13. Built for service, ABSOLUTELY FOOL PROOF.
14. Control switch so that any size rivet may be heated, regulating the heat as desired.
15. Eliminates upkeep of old style forges.

Equipments are available in all sizes and for all commercial voltages alternating current. Let us estimate on your requirements. Prices upon application.

Industrial and Structural Electric Rivet Heating Forges are manufactured as follows:

Rivets diameter.

Model I—Type A-2—¼ to ½′—6″ long.
Model I—Type B-2—½ to ¾″—6″ long.
Model I—Type C-2—¾ to 1½″—6″ long.

Model S—Type for construction work small and compact. Same type as the Industrial Forge without wheels.

We will be glad to quote prices on any devices for special heating purposes, at any time. Our engineers will help solve your heating problems upon request, for annealing, hardening, welding, blacksmithing.

QUALITY **PROMPTNESS** **SERVICE**

Patented and Manufactured by

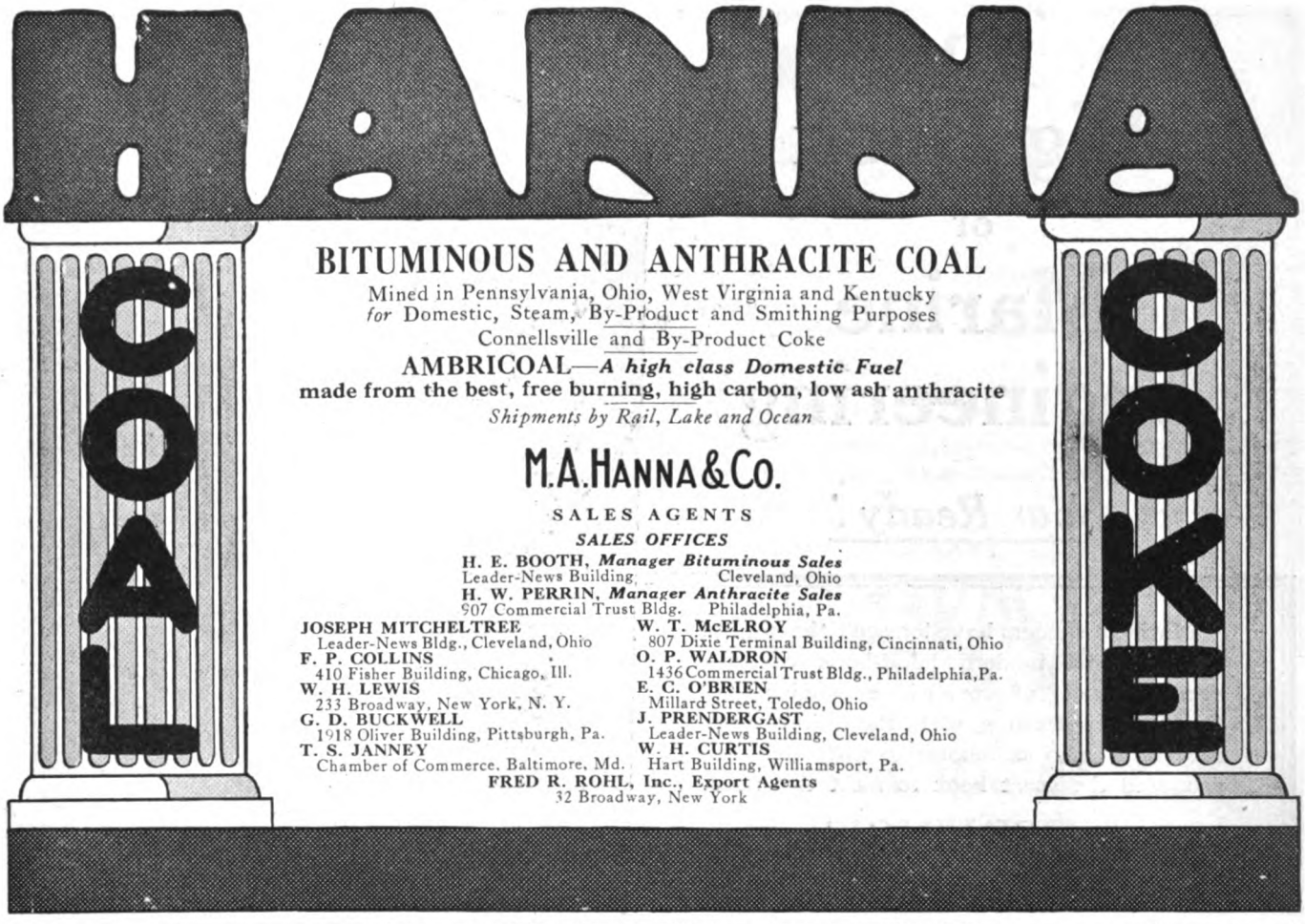
The United States Electric Company

Manufacturers ***Engineers***

Marine Railways **Electric Welding and Cutting.** **Ship Repairs**

Plant: New London, Connecticut

Generated on 2024-08-28 00:03 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



BITUMINOUS AND ANTHRACITE COAL

Mined in Pennsylvania, Ohio, West Virginia and Kentucky
for Domestic, Steam, By-Product and Smithing Purposes
Connellsville and By-Product Coke

AMBRICOAL—*A high class Domestic Fuel*
made from the best, free burning, high carbon, low ash anthracite

Shipments by Rail, Lake and Ocean

M. A. HANNA & CO.

SALES AGENTS

SALES OFFICES

H. E. BOOTH, *Manager Bituminous Sales*
Leader-News Building, Cleveland, Ohio
H. W. PERRIN, *Manager Anthracite Sales*
907 Commercial Trust Bldg. Philadelphia, Pa.

JOSEPH MITCHELTREE
Leader-News Bldg., Cleveland, Ohio
F. P. COLLINS
410 Fisher Building, Chicago, Ill.
W. H. LEWIS
233 Broadway, New York, N. Y.
G. D. BUCKWELL
1918 Oliver Building, Pittsburgh, Pa.
T. S. JANNEY
Chamber of Commerce, Baltimore, Md.
W. T. McELROY
807 Dixie Terminal Building, Cincinnati, Ohio
O. P. WALDRON
1436 Commercial Trust Bldg., Philadelphia, Pa.
E. C. O'BRIEN
Millard Street, Toledo, Ohio
J. PRENDERGAST
Leader-News Building, Cleveland, Ohio
W. H. CURTIS
Hart Building, Williamsport, Pa.

FRED R. ROHL, Inc., Export Agents
32 Broadway, New York

STANDARD SHIPBUILDING CORP.

SHOOTERS ISLAND, MARINER'S HARBOR, NEW YORK CITY

BUILDERS AND REPAIRERS OF
SHIPS AND ENGINES
MARINE ENGINES
BOILERS OF ALL DESCRIPTIONS
MARINE RAILWAY 3500 TONS CAPACITY

Cable Address—STANBUILCO

THE LORAIN COAL & DOCK COMPANY

General Offices—Columbus, Ohio
Branch Office—Cleveland, Ohio

PRODUCERS and SHIPPERS
PITTSBURGH and WEST VIRGINIA COALS

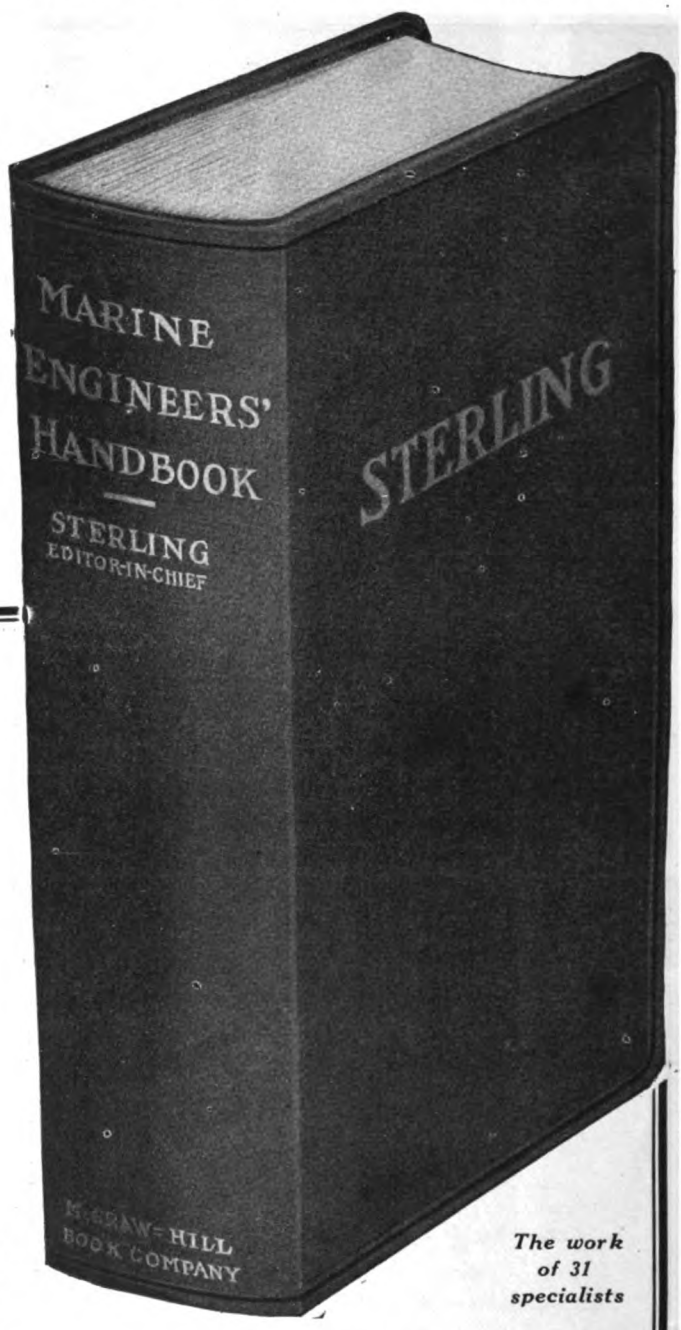
LOADING DOCKS
TOLEDO and LORAIN

FUEL LIGHTER
LORAIN, OHIO

Generated on 2024-08-28 00:03 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

The Big Book of Marine Engineering

Now Ready!



The work of 31 specialists

Marine engineers have long felt the need of an adequate, modern hand-book covering every phase of marine engineering. Commander Sterling with the thirty other specialists who collaborated with him has produced the great book to meet this need.

STERLING'S MARINE ENGINEERS' HANDBOOK

Editor-in-Chief FRANK W. STERLING

Lieutenant Commander, U. S. Navy, Design Division, Bureau of Steam Engineering.
Assisted by 30 Specialists

1450 pages, 4½ x 7, flexible **$7.00 net postpaid**

Here is the standard reference information on marine engineering in one compact, well-indexed, authoritative handbook.

Read this list of section headings:

I —Tables and Formulae and Mechanics of Rigid Bodies.
II —Metals and Heat.
III —Fuels and Combustion—Fuel Oil Burning.
IV —Marine Boilers.
V —Turbines and Mechanical Reduction Gears.
VI —Reciprocating Engines.
VII —Marine Diesel Engines.
VIII—Vacuum and Condensers.
IX —Ship Forms and Powering and Screw Propellers.
X —Auxiliary Machinery.
XI —Piping, Valves and Fittings.
XII —Marine Electrical Installation.
XIII—Lubrication.
XIV—Measuring H. P. of Marine Engines.
XV —Tests, Trials and Inspection of Machinery.

Use the coupon

THE PENTON PUBLISHING CO.
BOOK DEPARTMENT
PENTON BLDG. CLEVELAND

Enclosed is $7.00 for which kindly send to the undersigned, a copy of Sterling's **Marine Engineers' Handbook**, postpaid.

Subscriber to MARINE REVIEW?.....

Name.....

Address.....

Official Position.....

Name of Company.....

115 M

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

SOMETIMES
Even
TRANSIT PUMPS
Need a Few Repairs.

Why not have your man in charge go over the old timers. A new part here and there will probably put them in ship shape again for the rush that is coming—say, in a few months.

Be Prepared. When opportunity knocks this time,—have your hand on the knob.

NATIONAL TRANSIT PUMP & MACHINE CO., Oil City, Pa.

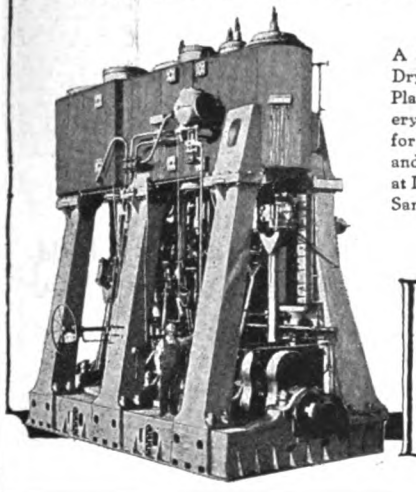
DISTRICT OFFICES: New York Kansas City Pittsburgh Philadelphia Cleveland Houston Denver

Los Angeles Shipbuilding & Dry Dock Co.

Shipbuilders and Engineers

Designers and Builders of all types of Steel Ships, Marine Engines, Boilers, Auxiliaries, Equipment.

Unlimited Repair Facilities for Steel and Wood Vessels, their Machinery and Equipment. 12,000-Ton Floating Dry Dock. Building Slips and Fitting Wharves. Two 100-Ton Shear Legs. Ocean and Harbor Tugs. Completely Equipped Shops.



A Ship Construction Dry Dock and Repair Plant, complete in every detail, maintained for service to the Navy and Merchant Marine at Los Angeles Harbor San Pedro, California

Type of 3,500 I. H. P. Marine Engine designed, built and installed in 27 freighters

LAUNCHING GREASE PARAGON LAUNCHING STEARINE

A
REMARKABLE
RECORD OF
EFFICIENCY
SUCCESSFULLY USED AND ENDORSED
by over half the yards on the Atlantic and Gulf Coasts
ECONOMICAL
FIRST COST LOW—CAN BE RECOVERED
and used again without impairing its efficiency

Write for particulars

BORNE, SCRYMSER CO.
Established 1874
80 South Street, NEW YORK

BOSTON, 36 Central Wharf
PHILADELPHIA, 437 Chestnut St.

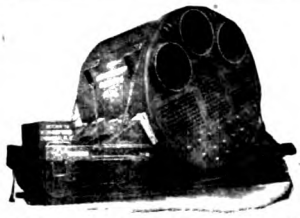
GALLEY EQUIPMENT
that gives a big measure of Service

We can meet your requirements in Galley Equipment in a way that will please you from the standpoint of quality, service and price.

May we send full particulars and prices?

VICTOR V. CLAD COMPANY
217-219 S. 11th St. **Philadelphia, Pa.**

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



Scotch, Leg and Water Tube

MARINE BOILERS

Unusually prompt shipment of
any type Marine Boiler

Circulating, Wrecking and Dredging Pumps

High and Low Head Centrifugal Pumps

Kingsford-Stumpf Marine Una-Flow Engines

which show remarkable economy

KINGSFORD FOUNDRY AND MACHINE WORKS Office and Works OSWEGO, N. Y.

You Need

Albany

REG. U. S. PAT. OFF.

Grease

Aboard Ship!

Albany Grease is good grease. It doesn't drip nor spatter around — keeps the ship clean. There's no waste, every particle is consumed in doing useful work — it's economical.

(REG. U. S. PAT. OFF.)
A MARK
known and respected around the world since 1868, for fair dealing, a quality product and an unexcelled service.

It keeps the bearings cool — safe — eliminates danger of journals binding — burnt out bushings — it helps keep the ship moving — it's efficient.

Ask us for a sample large enough to make a real test — now. Your dealer stocks it because he knows it's good.

ADAM COOK'S SONS
708-10 Washington Street
NEW YORK N. Y.
Established 1868

C-124

BATH IRON WORKS, Ltd.

Bath, Maine

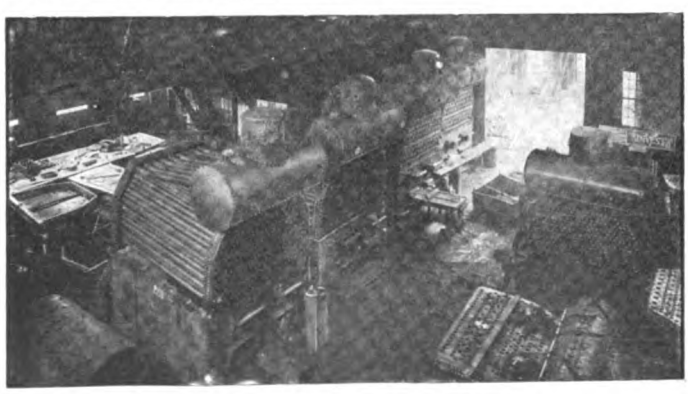
Steel Shipbuilders and Engineers

Builders of

Cargo Steamers
Oil Tankers
Coastwise Passenger Steamers
Steel Steam Yachts
Marine Boilers
Normand Water Tube Boilers
Licensees for Parsons Marine Steam Turbines

This Company has been very successful in building high speed vessels for the United States Navy and for private owners

New York Office, 23-31 West 43rd Street
Walter A. Murtaugh, Representative
Telephone: Murray Hill 0778



Main Floor Showing Boilers Built for U. S. Navy

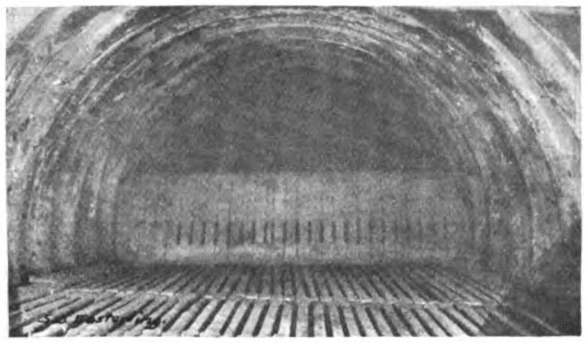
STATIONARY AND MARINE WATERTUBE BOILERS

Write for Specifications

Bridgeport Boiler Works Co.
ESTABLISHED 1865
Bridgeport, Conn.

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-08-28 00:03 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY



Sturrock Improved Bridge Wall After 60,000 Miles Service
No Repairs Required

Cast Iron Ventilated

FURNACE BRIDGE WALLS

(Sturrock Improved Type)

Increases Combustion — Saves Fuel
Eliminates Clinkers — Increased Grate Area
Facilitates Cleaning Fires — Uniform Steam Pressure
Installed in 30 Minutes — Lasts for Years
Applicable All Types of Boilers — Either Hard or Soft Coal

Folder sent upon request.

Manufactured by

W. W. BOOTH

26 Cortlandt St. **New York, N. Y.**

JOS. H. FOUNTAINE, Canadian Representative, 34 Dalhousie St., Quebec.

GEYSER BOILER CLEANERS

Save Coal and Keep Your Boilers Clean

Engineers that are trying to reduce operating expenses do not hesitate to recommend ***Geyser Boiler Cleaners.***

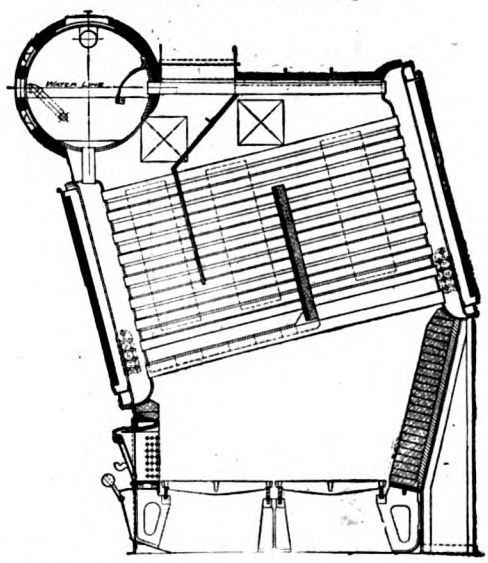
Geyser Boiler Appliance Company

2655 East Atwater St.

DETROIT, MICH.

The Wickes Marine Boiler

Water Tube Type



No wrapper sheet. No riveted joints near fire All rivets driven in header with hydraulic riveter. One caulked joint in header visible at all times.

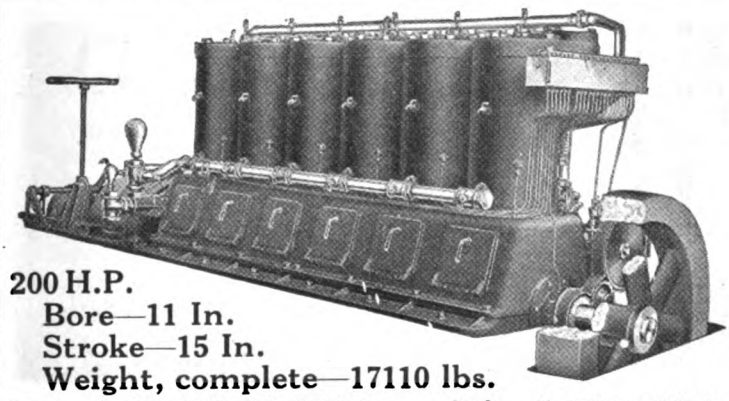
Write for Bulletins—Sent Free

THE WICKES BOILER CO.

Saginaw **Michigan, U. S. A.**

Sales Offices:

New York, 1716 West Street Bldg. Boston, 201 Devonshire St.
Pittsburg, 1218 Empire Bldg. Detroit, 1116 Penobscot Bldg.
Chicago, 76 West Monroe St. Seattle, 736 Henry Bldg.
San Francisco, 402 Rialto Bldg.



200 H.P.
Bore—11 In.
Stroke—15 In.
Weight, complete—17110 lbs.

"WOLVERINE"

Heavy Duty Marine Engines

for Lighters, Tenders, Tugs, Houseboats and Yachts.

KEROSENE { Used successfully over 15 years. / Device built into engines.

WOLVERINE MOTOR WORKS

5 Union Ave.

(Formerly Grand Rapids, Mich.) **Catalogue No. 133 gives full information** **Bridgeport, Conn., U. S. A.**

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

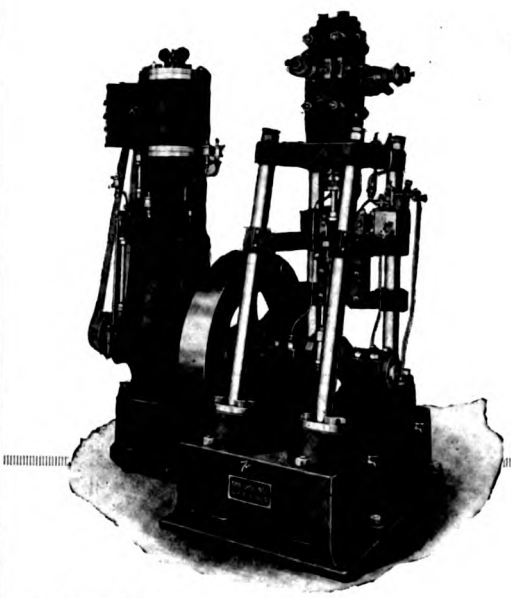
Atlas Steel Casting Company

General Office and Works:
BUFFALO, N. Y.

Acid Open Hearth Steel Castings Exclusively

FRANK D. MOFFAT & CO.
New York and New England Sales Agents
81 Fulton Street, New York

SEND FOR LITERATURE



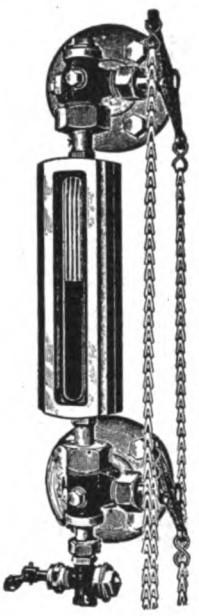
KROESCHELL
CARBONIC SAFETY REFRIGERATING EQUIPMENT

This equipment answers all possible requirements and is light, extremely Durable and safe. Used and endorsed by many Lake Vessels.

Kroeschell Bros. Ice Machine Co.

New York City CHICAGO Detroit, Mich.

JERGUSON



Engineering Specialties

Reflex Water Gages
Used on all types of boilers by all the Principal Navies of the World

"The Water Shows Black"

ADVANTAGES:

Quick and reliable observations of the water level. Safe, sure and durable at high pressures. Not affected by cold air drafts. Most effective protection against injuries to boilers and workmen. Easily applied to all types of gage glass fittings.

When filled with WATER the Reflex Gage always appears BLACK. When empty it instantly shows WHITE. No mistake possible. This feature alone is worth many times the cost of the Reflex.

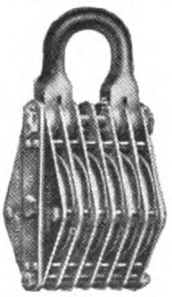
We specialize in water gage apparatus.

Jerguson Gage & Valve Co.
Winter Hill, Somerville, Mass.

BOSTON & LOCKPORT BLOCK CO.

124 Condor Street, EAST BOSTON, MASS.
NEW YORK CITY 32 South Street
CHICAGO 413 Fort Dearborn Bldg.

Manufacturers of
STAR BRAND
BLOCKS
Special Blocks of all styles for all kinds of heavy work
STRONGEST BLOCKS MADE
★ SPECIALTIES ★
TACKLE BLOCK OUTFITS FOR WOOD OR STEEL SHIPS AND ALL STYLES OF
—MARINE WORK—
DIAPHRAGM PUMPS



STEWARD
Life-saving Equipment
"Safety at Sea"

MECHANICAL DAVITS
LIFE BOATS
GRIPES & LASHINGS
NON CAPSIZING BLOCKS
BOAT RELEASING GEARS
BOAT FALLS CONTROLLERS
BOAT CHOCK FITTINGS
LINE THROWING GUNS

Steward Davit & Equipment Corp.
17 Battery Place, New York

FACTORY
HUDSON, N. Y.

STEWARD DAVITS, LTD.
LONDON

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Congressional Information Bureau

CLAUDE N. BENNETT, Manager — JAMES I. PARKER, Law Department
H. A. COLMAN, Secretary — D. L. SELKE, Research Department
Established 1897
Southern Building
Washington, D. C.

We make a business of preparing to order for clients throughout the country any data wanted from Washington—statistical, historical, legal or otherwise; of keeping them advised upon matters pending in Congress, the departments and the courts; of representing them in any desired capacity.

Special attention to all matters relating to shipping: Daily reports covering orders and regulations issued by the Shipping Board; the allocation of vessels and assignment of managers and operators; announcements or rulings concerning freight rates.

Rulings of the War Trade Board; decisions of the Treasury Department; departmental and congressional action upon immigration; attention to business before all Government Departments.

We represent bidders on supplies for all bureaus of the Government.

Legal service, when desired, in charge of a competent law department

THE AMERICAN WAY · SUPREME IN SERVICE

ASBESTOS

Instant and expert attention given to PIPE and BOILER COVERING work on ships from the smallest repair job, to be done at a moment's notice, to the covering of the pipes and boilers throughout a new ship.

American Insulation Company
Philadelphia, Pa.

Geo. Oldham & Son Co.

Manufacturers of

PNEUMATIC TOOLS

Scott & McHenry Sts., Baltimore, Md.

Chipping and Calking Hammers

Riveters and Holder-Ons

Jam Riveters

All sizes and capacities for the shipyard

Complete line of pneumatic tools of merit

FOR SHIPBUILDING

TOOLS SENT ON APPROVAL

OLIVER IRON & STEEL CO.

ESTABLISHED 1863

Manufacturer of

Bolts, Nuts, Rivets, Washers, Picks, Mattocks and Grub Hoes, Crow Bars, Wedges, Forgings, Wagon Irons and Singletree Trimmings, Telephone and Telegraph Pole Line Hardware, Screw Railroad Spikes and Boat Spikes, Steel Bars and Concrete Reinforcement Bars.

Send for our Standard Price List.

General Office and Works: Pittsburgh, Pa.
Branch Offices: 50 Church St., New York City.
Monadnock Building, San Francisco, Cal.

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

ROPE WITH A REPUTATION

Manila
Sisal
Wire
Marline
Covered

ROPE

Send to-day for your copy of our

1922 CATALOGUE

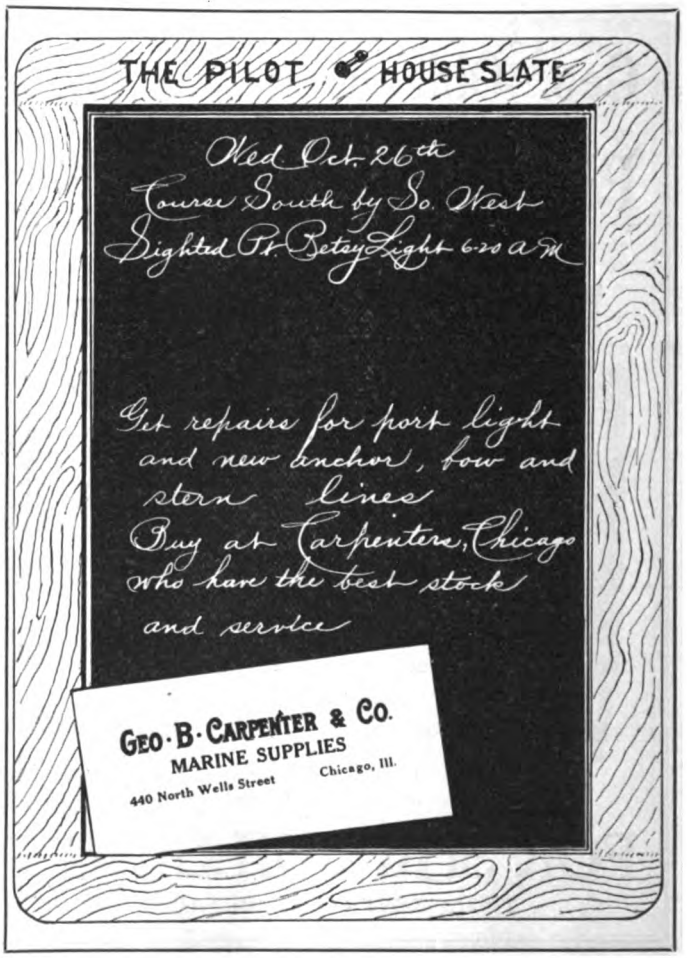
Let This Mark Be Your Guide
As you trust your compass to guide you safely to port, so you may trust the mark WC to guide you to Dependable Marine Hardware.
Three generations of deep sea sailors have tested the Quality and Service of the WC Line. To their approval of its sea-worthiness we owe our present standing as the World's Largest Manufacturers of Marine Hardware.
Wilcox, Crittenden & Co., Inc.
7 South Main St. Middletown, Conn.
ESTABLISHED 1847

HYDE
Windlass Company
BATH, MAINE

High Grade Marine Auxiliary Machinery and Manganese Bronze Propellers of all sizes.

WINDLASSES,
STEERING GEARS,
CAPSTANS,
CARGO WINCHES
steam, hand and electrically operated.

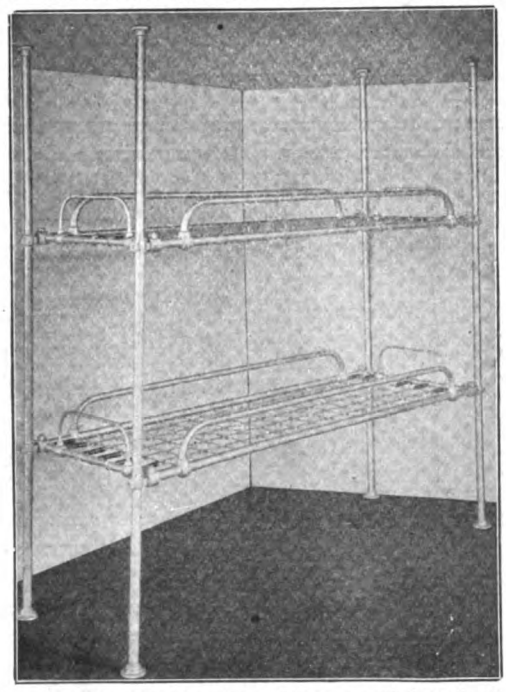
WHEN ORDERING SPECIFY
"HYDE"


THE PILOT HOUSE SLATE
Wed Oct. 26th
Course South by So. West
Sighted Pt. Betsy Light 6:20 a.m.
Get repairs for port light and new anchor, bow and stern lines
Buy at Carpenters, Chicago who have the best stock and service
GEO. B. CARPENTER & CO.
MARINE SUPPLIES
440 North Wells Street Chicago, Ill.

Generated on 2024-08-28 00:07 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

BERNSTEIN METAL BERTHS

offer a complete, practical and efficient line.
A berth to successfully meet every condition on board ship.



Bernstein No. 5553 Third Class Steerage and Crew Berths.

Write for catalog No. 17 descriptive of Bernstein Berths, Ship Beds, Bedding and Metal Furniture.

Department R — Bernstein Manufacturing Company — 3rd and Allegheny Avenue Philadelphia, Pa.

EVER-WARM SAFETY SUIT

Complete Protection

used by U. S. Navy Dept. assures 100% safety at sea being absolute insurance against

DROWNING

—put on in a minute over your clothes —seals tight—keeps you dry and warm —you can't chill—no fear of

EXPOSURE

On deck or overboard you are snug and comfortable, immune to cold

WIND and WAVE

not only will save you but makes it possible to rescue others. For duty over the side—in dock or

AT WORK ABOARD

the Ever-Warm is absolutely Essential Equipment—one for everyone on board —means safety and peace of mind.

Ocean Voyagers Ask About Rental Plan. Pamphlet "25 A" tells the complete story.

NATIONAL LIFE PRESERVER COMPANY
Tel. Bowling Green 8609 — 11 BROADWAY, NEW YORK
(Some Agencies in U. S. and Foreign Countries Still Open)

EVER-WARM SAFETY SUIT

THE RITCHIE LIQUID COMPASS

Liquid Compass

The Standard Liquid Compass the world over.
Used Exclusively in U. S. Navy for over 40 years.
Over 40,000 on Merchant Vessels in all parts of the world.
Made in all sizes 2 to 12" dia.
Magnets for Adjusting Purposes.

E. S. RITCHIE & SONS, Brookline, Mass., U. S. A.

Boat Compass in Binnacle

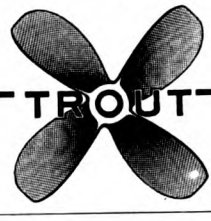
H. G. TROUT CO.

BUFFALO, NEW YORK

Solid and sectional, Semi-steel and Bronze

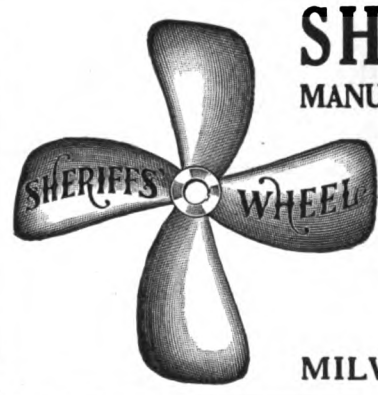
PROPELLER WHEELS
MARINE STEAM ENGINES

QUALITY SERVICE



ESTABLISHED, 1854.

SHERIFFS MANUFACTURING CO.



PROPELLER WHEELS and PROPELLER BLADES to fit any hub.

MILWAUKEE, WIS.

BUILDING THE EMERGENCY FLEET—*by W. C. Mattox*

THIS book is more than a historical review of the war activities of a federal department. It is a story of a successful American business enterprise which encountered and overcame problems common to most industrial organizations.

$5.00 PER COPY, POSTPAID

THE PENTON PUBLISHING CO., BOOK DEPARTMENT CLEVELAND, OHIO 437 I M

Generated on 2024-08-28 00:07 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

AMERICAN
DESIGNERS AND BUILDERS
OF
DIESEL ENGINES
SINCE 1898

BUSCH-SULZER

STATIONARY
120 to 3300 B. H. P.
MARINE
600 to 3000 S. H. P.

BUSCH-SULZER BROS.-DIESEL ENGINE CO., ST. LOUIS, U. S. A.

MADESCO PRODUCTS
MARINE DECKING & SUPPLY CO. PHILADELPHIA

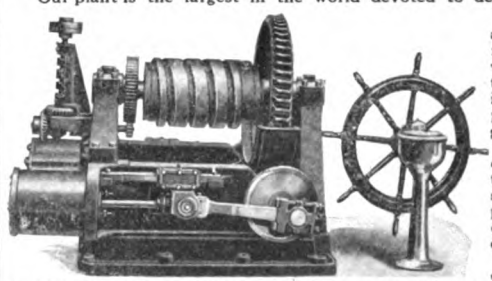
LIT-O-SIL-O DECKING
MADESCO MARINE PAINTS & VARNISHES
MADESCO WOOD & STEEL TACKLE BLOCKS
MADESCO BITUMINOUS SOLUTION & ENAMEL

MANUFACTURERS • CONTRACTORS • ENGINEERS

MADESCO MEANS QUALITY & SERVICE

SHIP DECK MACHINERY

We are building the "Built Right Run Right" line of Ship Deck Machinery.
Our plant is the largest in the world devoted to deck equipment.



Superior design and excellence of material and workmanship — together with interchangeable parts insure high grade equipment. Facilities for quantity production make it possible to make prompt shipment of standard machines.
Send for printed matter.

THE HADFIELD-PENFIELD STEEL CO., Bucyrus, Ohio
Formerly American Clay Machinery Co.
Philadelphia Office, 516 Liberty Bldg.

Phone
CHESTER 2150

BALDT
ANCHOR AND CHAIN CO.
CHESTER, PA.

Cable Address
BALANCO—ABC 5th EDITION

STOCKLESS, OLD STYLE AND MOORING ANCHORS | STUD LINK CHAIN SHACKLES | DROP FORGINGS HEAVY FORGINGS

DURABLE WIRE ROPE
The Marline Served Rope
For All Ships Purposes

Especially adapted for
CARGO WHIPS
TOPPING LIFTS
GUY TACKLES

DURABLE WIRE ROPE COMPANY
BOSTON, MASS.
Chicago Cleveland Philadelphia New York

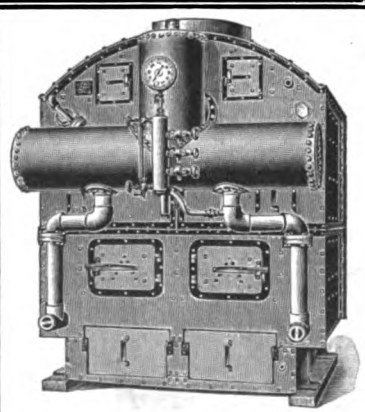
STRATFORD SPECIAL
NO. 1 MARINE OAKUM

receives the highest classification of
American Bureau of Shipping—Lloyds' Register of Shipping

More STRATFORD OAKUM is used with greater satisfaction as well as with greater economy than all other makes combined, as it contains less waste and requires less labor to caulk.

STRATFORD SERVICE AND QUALITY
are worth more than the price asked.

GEORGE STRATFORD OAKUM CO.
Jersey City, N. J.



CATALOGUE FREE

Almy Water Tube Boiler Co.

Builders of Sectional Water Tube Boilers for all types of vessels

Providence, R.I. U. S. A.

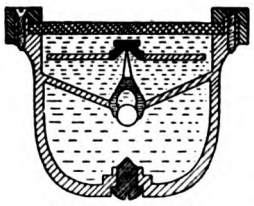
AERO
AUTOMATIC FIRE ALARM
There has never been a serious fire loss on ships protected by *Aero*.
26 Cortlandt St. New York City
Central Bldg. Seattle

"HOW WOODEN SHIPS ARE BUILT"
By H. COLE ESTEP
A book packed full of useful information for the busy practical shipbuilder. Every new method of construction shown in 188 big, easy-to-see illustrations. A complete story which takes the reader through every step of shipbuilding, beginning with the standing tree and ending with the trial ship with a supplement to laying off.
Price $3.00 Prepaid
PENTON PUBLISHING COMPANY
Book Department
Penton Building Cleveland, O.
533 M

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

AT LAST!

A BUBBLELESS COMPASS



CROSS SECTION

Extreme temperature changes which destroy the usefulness of compasses need no longer annoy navigators. The BUBBLELESS COMPASS, with its check relief valve assures easy removal of any bubble that may form. The secret is not in the liquid, but in our patented, fully tested relief valve. We are now manufacturing a two inch compass and larger sizes.

BUBBLELESS COMPASS, Inc.

225 STARR STREET, BROOKLYN, N. Y.

Ship Cable Chain
Steering Gear Chain
Stud Link Chain
Marine Chain

AMERICAN CHAIN COMPANY

INCORPORATED

BRIDGEPORT, A·C·C CONN., U. S. A.

LARGEST CHAIN MANUFACTURERS IN THE WORLD

BRIGGS **BRIGGS**

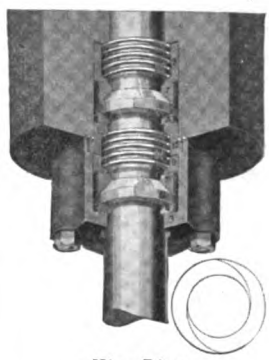
BITUMINOUS COMPOSITIONS

The least costly corrosion preventives for vessels of any type. Give absolute protection and last for years. Recommended for cellular double bottoms, peak and ballast tanks, boiler and engine settings, etc.

Send for free catalog: "The Solution of the Corrosion Problem."

BRIGGS BITUMINOUS COMPOSITION CO., INC.

17 Battery Place New York, N. Y.



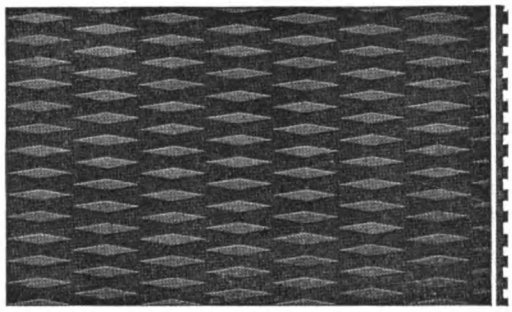
King Ring in Two Parts

KING METALLIC PACKING

For All Pressures

THE U. S. METALLIC PACKING CO.

Philadelphia
New York Chicago
New Orleans



Rolled Steel *"NEVERSLIP"* Floor Plates

AMERICAN PRESSED STEEL CO.
PHILADELPHIA, PA.

Immediate Shipment from stock

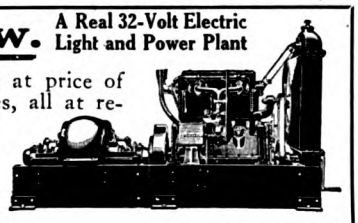
Bolts, Nuts, Washers, Screws, Rivets, Tools, etc.

Have you my catalogue No. B?

HENRY FRANK, Jr.
372-380 Hudson Street
New York City

$295.00 Now. A Real 32-Volt Electric Light and Power Plant

See the Matthews Automatic at price of the cheaper plants. Six sizes, all at reduced prices. Made in Ohio



Write for particulars: Salesmen's and dealer's best opportunity.

THE MATTHEWS ENGINEERING CO.
Alma Street, Sandusky, Ohio

THE CHASE MACHINE CO.

ENGINEERS AND MACHINISTS

Mooring Machines, Deck Winches, Steam Capstans, Etc., Etc.

Address 2313 Elm St., N. W. Cleveland, Ohio

The Oldman Boiler Works

Boilers, Tanks, Stacks, Structural Work and Castings

Boiler Repairing Promptly Attended to Day or Night

MARINE WORK A SPECIALTY ELECTRIC WELDING

Works: 36-40 Illinois Street - BUFFALO, N. Y.

NATROCO PAINT & VARNISH WORKS

Fillmore Ave. - - TONAWANDA, N. Y.

Makers of Marine Paints

A phone call from Buffalo (Bell Bidwell 4034) will secure prompt delivery via our motor trucks to dock or supply boat.

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Vessel and Insurance Agents

332 So. LaSalle St. CHICAGO — Kirby Bldg. CLEVELAND
Marine Insurance
JOHN PRINDIVILLE & SONS
Vessel Agents and Brokers
302 Mitchell Bldg. MILWAUKEE — Grain Exchange WINNIPEG

OSBORN & COMPANY
INSURANCE - AVERAGE ADJUSTERS
Hulls and Cargoes (All Classes). Direct facilities for placing insurance in all home and foreign markets.
INSURANCE EXCHANGE
175 West Jackson Blvd. CHICAGO, ILL.

John J. Boland — Adam E. Cornelius
BOLAND & CORNELIUS
VESSEL OWNERS AND BROKERS
Marine Insurance Agents
1204 Prudential Building
BUFFALO, N. Y.

EDWARD P. FARLEY CO.
Vessel Brokers
Passenger and Freight Steamers, Tugs, Lighters, Self-Propelled Canal Barges
6 North Michigan Ave. Chicago, Illinois

Naval Architects and Engineers
Proctors in Admiralty

WILLIAM T. DONNELLY
Designer of Floating Dry Docks, Steel and Wood.
PLANS ON HAND FOR DOCKS FROM 2,000 TO 20,000 TONS
Electricity applied to Marine Transportation
Harbor Improvements
Consulting Engineer and Naval Architect
17 Battery Place NEW YORK

WARREN, CADY, HILL & HAMBLEN
ATTORNEYS AT LAW AND PROCTORS IN ADMIRALTY
Charles B. Warren
William B. Cady
Sanford W. Ladd
Joseph G. Hamblen, Jr.
Sherwin A. Hill
Claudius B. Grant, Counsel
Union Trust Building, Detroit

PATENTS
TRADEMARKS AND COPYRIGHTS
Thirty years' active practice. Experienced, personal, conscientious service. All business strictly confidential.
SIGGERS & SIGGERS
PATENT LAWYERS
Suite 11, National Union Ins. Bldg., Washington, D. C.

CONSULTING ENGINEERS
NAUTICAL AND ENGINEERING APPLIANCES
THE McNAB COMPANY
BRIDGEPORT, CONN.

Alabama Hewn Oak Timber
Trade 7 Mark
Reg. U. S. A.
THE S. K. TAYLOR LUMBER COMPANY
Mobile, Alabama

THE MULHOLLAND HATCH-FASTENER COMPANY
Main 272 Marion Building, Cleveland, Ohio Cent. 1016
Manufacturers of the Mulholland Simplex and Security Hatch Fasteners. For Ocean and Lake Trade.
OVER 225,000 SETS NOW IN USE ON THE GREAT LAKES

ANDREW J. MORSE & SON, Inc.
221 High Street BOSTON, MASS.
Established 1837
Diving Apparatus and Submarine Armor
Fire Department Supplies
The Morse Monitor Nozzle
Callahan Shut-Off Nozzle

LIFE PRESERVERS
Cork Cushions, Fenders, Cork Ring Buoys
"Ye Oldest Cork House in America"
ESTABLISHED 1865
JUSTUS BRAUER & SON
129 Arch Street Incorporated Philadelphia, Pa.

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Classified Advertisements

Help and Positions Wanted—For Sale and Miscellaneous

"Help Wanted" Advertisements
6c per word—minimum advertisement—$3.00
All capitals—8c a word—minimum $4.00

"Position Wanted" Advertisements
4c per word—minimum advertisement—$1.00
All capitals—5c a word—minimum $1.25

"For Sale and Miscellaneous" Advertisements
10c per word—minimum advertisement—$3.00
All capitals—15c a word—minimum $4.50

Seven (7) words must be added for box address.

To insure insertion, advertisements must reach us by the 9th of the month.

Please have remittance accompany order.

For Sale

FOR SALE:—TWO FORE AND AFT Marine Engines, size 23" x 46" x 36" stroke. Built by Hodge, Detroit 1895. These engines are in first class working condition, complete with independent airpump, shaft couplings and propellers. The right size engines for Welland Canal size steamers. For price and particulars write Hammermill Paper Company, Erie, Pa.

FOR SALE

2½ K.W. Engberg 110 volt engine generating set.
3 K.W. Engberg 110 volt engine generating set.
3½ K.W. Engberg 110 volt engine generating set.
All complete and fully guaranteed.

JAS. A. GRAHAM
30 Church Street, New York City.

MODERN MARINE MACHINERY

Automatic Steam Towing Machines, ship windlasses, cargo and deck winches, steam capstans, dock gypsies, steering engines, hydraulic freight hoists, etc. Gray Iron and brass castings. Special machinery built to order. The Corbet Foundry & Machine Co., Ltd., Owen Sound, Ont.

For Sale

FOR SALE:—STEAM TUG, SUITABLE for towing or fishing. Best buy on the Lakes for the money. Address Box 320, MARINE REVIEW, Cleveland, O.

Positions Wanted

NAVAL ARCHITECT, 20 YEAR'S EXPErience, desires position with Shipyard, Yacht-building yard; or Designing or Ship brokerage Firm. Address NAVAL ARCHITECT, Room 602, 136 S. 4th St., Phila., Pa.

Wanted

WANTED:—A TUG OR SMALL STEAM tow boat. Give size of engine; steam allowed boiler, and when last inspected. Address Box 322, MARINE REVIEW, Cleveland, O.

Wanted

WANTED:—A SMALL STEAM BARGE. State general condition of boat and price. Address Box 321, MARINE REVIEW, Cleveland, O.

WANTED:—FREIGHT AND PASSENGER steamer. Iron or steel hull. About 200 feet long. Screw propeller, not less than 16 miles per hour. About 600 gross ton. Address Marine, 710 Tribune Bldg., Chicago, Ill.

WANTED:—200' STEEL PASSENGER and freight steamer. Speed fifteen miles. We have for sale a 10 by 11 Scotch boiler allowed 160 pressure. Address Box 323, MARINE REVIEW, Cleveland, O.

WANTED:—FREIGHT AND PASSENGER Steamer, Iron or Steel hull. Must be economical as to fuel consumption, not less than 100 ft. and not more than 120 ft. in length. Must be well equipped. Not less than 12 Miles per hr. Must carry at least 75 tons freight. Miller-Herrick, Box M, Bayfield, Wis.

Get the Cash!

Somewhere there is a shipping concern that can use your surplus tonnage.

Somewhere there is a company that is willing to pay cash for that idle engine, boiler or winch that is useless to you.

Hundreds of buyers depend upon the Classified-Ad section of Marine Review as a source of supply. It is constantly referred to by ship owners, operators and officers in search of boats and equipment.

Send us a description of whatever you desire to sell and instruct us to insert a buyer-getting advertisement in the next issue.

Do it now—putting it off may mean the loss of a sale.

MARINE REVIEW
Cleveland, Ohio

Write for our convenient Classified-Ad Service folder

688

FOR SALE
COMPLETE OUTFIT FOR TWIN SCREW VESSEL

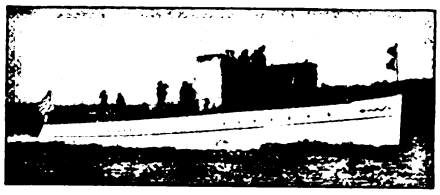
2—16-26-44 x 26 TRIPLE EXPANSION ENGINES with Surface CONDENSER, AIR & CIRCULATING PUMPS and SHAFTS.
2—Babcock & Wilcox Water Tube BOILERS 200 lbs. pressure with STACK.
2—Boiler FEED PUMPS.
STEERING ENGINE for hand or power.
20 K.W. General Electric LIGHTING SET.
2½ K. W. General Electric LIGHTING SET.
1 ton ICE MACHINE.
Hyde WINDLASS with180 fathom 1⅛" CHAIN.
2—10000 lb. Baldt ANCHORS.
1000 lb. Baldt ANCHOR.
15 ton EVAPORATOR.
Reilly Feed Water HEATER.
Cory Engine Room TELEGRAPHS.
Wireless Outfit, equipment was NEW in 1918.

Also

Complete Engine Room Outfit for a VERY FAST Twin Screw YACHT or PASSENGER BOAT

2—11-17-24-32 x 18 QUADRUPLE EXPANSION ENGINES 600 RPM, maximum H. P. 4000, with Shafting, Propeller Wheels, Bronze Struts.
1—Surface CONDENSER Copper Shell with Independent AIR & CIRCULATING PUMPS.
Electric Light Plant.
Steam Steering Engine,
with all Copper and Brass Piping, Telegraphs and everything necessary for re-installation.

This outfit is now in the yacht "Arrow"



which has a record of over 45 MILES per hour. Hull 130' x 12' x 4'6" draft. Hull and Machinery in excellent condition. With the installation of New Boilers there can be had probably the FASTEST BOAT in the UNITED STATES. Can be purchased for less than the value of the engines alone.

MARVIN BRIGGS, INC.
167 Sixth St. **Brooklyn, N. Y.**

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Index to Advertisements

A

Aero Alarm Co..... 62
Air Reduction Sales Co..... 3
Ajax Rope Co., Inc..... 60
Almy Water Tube Boiler Co.. 62
American Bridge Co..... 50
American Chain Co., Inc..... 63
American Engineering Co..... 29
American Insulation Co..... 59
American Mfg. Co..... 9
American Pressed Steel Co..... 63
American Shipbuilding Co..10, 11
Ashton Valve Co..... 32
Atlas Steel Casting Co..... 58

B

Babcock & Wilcox Co., The... 32
Baldt Anchor & Chain Co..... 62
Bath Iron Works, Ltd..... 56
Bernstein Mfg. Co..... 61
Bethlehem Shipbuilding Corp., Ltd. 22, 23
Blake, Townsend 49
Boland & Cornelius..... 64
Booth, W. W..... 57
Borne, Scrymser Co..... 55
Boston & Lockport Block Co.. 58
Brauer, Justus, & Son..... 64
Bridgeport Boiler Works Co... 56
Briggs Bituminous Comp. Co., Inc. 63
Briggs, Marvin, Inc..... 65
Brunswick Refrigerating Co... 32
Bubbleless Compass, Inc..... 63
Busch-Sulzer Bros. Diesel Engine Co. 62

C

Carpenter, Geo. B., & Co..... 60
Chase Machine Co..... 63
Clad, Victor V., Co..... 55
Coes Wrench Co..... 8
Commercial Coal Co., Inc..... 49
Congressional Information Bureau 59
Continental Iron Works, The.. 14
Cook's Sons, Adam..... 56
Cory-Mann-George, Corp..... 49
Craig Golfmeter Co..... 47
Crandall Engineering Co..... 28
Crane Co. 34
Crane's, Theo. A., Sons Co... 45

D

Despard & Co..... 49
Detroit Shipbuilding Co....10, 11
Diamond Power Specialty Co.. 21
Donnelly, William T..... 64
Durable Wire Rope Co..... 62

E

East River Stevedoring Corp.. 49

F

Farley, Edward P., Co..... 64
Fletcher, W. & A., Co. Front Cover
Flory, S., Mfg. Co..... 12
Foster Marine Boiler Corp.... 28
Frank, Henry, Jr..... 63

G

Gallagher, P. J., & Son..... 49
Geyser Boiler Appliance Co... 57
Great Lakes Engineering Works 18
Griscom-Russell Co., The..... 33

H

Hadfield-Penfield Steel Co., The 62
Hanna, M. A., & Co..... 53
Hartwell-Lester Coal Export Corp. 49
Hitner's, Henry A., Sons Co. 51
Hooven & Allison Co., The.... 8
Hush, H. J..... 30
Hyde Windlass Co..... 60

I

International Mercantile Marine Co. 43
Isherwood, J. W..... 68

J

Jerguson Gage & Valve Co.... 58
Jewett, Bigelow & Brooks.... 49

K

Kingsford Fdy. & Mch. Wks.. 56
Kirk & Treene, Inc..... 49
Kroeschel Bros. Ice Machine Co. 58

L

Lediard & Co., Inc..... 49
Lidgerwood Mfg. Co..... 6
Linde Air Products Co..... 4
Lorain Coal & Dock Co..... 53
Los Angeles Shipbuilding & Dry Dock Co..... 55
Lunkenheimer Co..... 25
Lynd-Farquhar Co. 52

M

McNab Co., The..... 64
Marine Decking & Supply Co.. 62
Marine Iron & Shipbuilding Co. 50
Matthews Engineering Co., The 63
Mercantile Specialties Corp.... 27
Morse, Andrew J., & Son, Inc. 64
Mulholland Hatch-Fastener Co. 64
Mundy, J. S., Hoisting Engine Co. 20
Munson Steamship Lines..... 41

N

National Lead Co..... 67
National Life Preserver Co. .49, 61
National Malleable Castings Co., The 24
National Rosin, Oil & Size Co. 49
National Roofing Co..... 63
National Shipping Co., Inc.... 49
National Transit Pump & Machine Co. 55
Natroco Paint & Varnish Wks. 63
New Jersey Paint Works..... 49
New London Ship & Engine Co. 16
Newport News Ship Building & Drydock Co.....Back Cover
New York Engineering Co.... 12
New York Maritime Service, Inc. 49
New York Shipbuilding Corp. .....Inside Front Cover

O

Oldham, George, & Son Co.... 59
Oldman Boiler Works, The.... 63
Oliver Iron & Steel Co..... 59
Osborn & Co..... 64

P

Port Directory 49
Powell Co., The Wm...Back Cover
Power Specialty Co..... 31
Prest-O-Lite Co., Inc..... 35
Prindiville, John, & Sons Co... 64

R

Radio Corporation of America. 51
Ritchie, E. S., & Sons..... 61

S

Sandusky Foundry & Machine Co. 16
Shepard Electric Crane & Hoist Co. .....Inside Back Cover
Sheriffs Mfg. Co..... 61
Siggers & Siggers..... 64
Standard Oil Co 39
Standard Shipbuilding Corp... 53
Steward Davit & Equip. Corp. 58
Stratford, Geo., Oakum Co.... 62
Sturrock Furnace Bridge Wall Co. 57
Sun Co. 37
Superheater Co., The..... 33
Superior Iron Works Co..... 13

T

Taylor, S. K., Lumber Co.... 64
Thomas Grate Bar Co..... 15
Tiebout, W. & J..... 30
Todd Shipyards Corp..... 26
Toledo Shipbuilding Co., The.. 17
Trout, H. G., Co..... 61

U

United Marine & Fuel Corp.47, 49
United States Electric Co.... 52
United States Metallic Packing Co. 63

W

Warren, Cady, Hill & Hamblen 64
White Fuel Oil Engineering Corp. 26
Whitlock Cordage Co..... 7
Wickes Boiler Co..... 57
Wilcox, Crittenden & Co., Inc. 60
Williams Shipping Agency, Inc. 49
Wittenmeier Machinery Co.... 14
Wolgast, A. O..... 49
Wolverine Motor Works..... 57

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

A coat of armor against rust

Men that own and operate ships are large users of Dutch Boy Red-Lead — the tough, elastic, waterproof paint that protects metal surfaces from rust.

The U. S. Navy, for instance, uses red-lead on all its vessels for almost every metal surface, because it withstands the action of salt water and preserves the steel.

Dutch Boy Red-Lead has the added advantage of greater spreading power than other paints for marine use. It gives a coat of uniform thickness and toughness, and won't chip, crack, or scale.

Dutch Boy Red-Lead does not harden in the pail. That means no red-lead wasted. No time cost.

Specify Dutch Boy Red-Lead for all metal surfaces. Can be tinted to your requirements for finishing coats.

Write for Painting Helps No. 16.

"Save the surface and you save all"—Paint & Varnish

NATIONAL LEAD COMPANY

New York	Boston	Cincinnati	San Francisco
Cleveland	Buffalo	Chicago	St. Louis

JOHN T. LEWIS & BROS. CO., Philadelphia NATIONAL LEAD & OIL CO., Pittsburgh

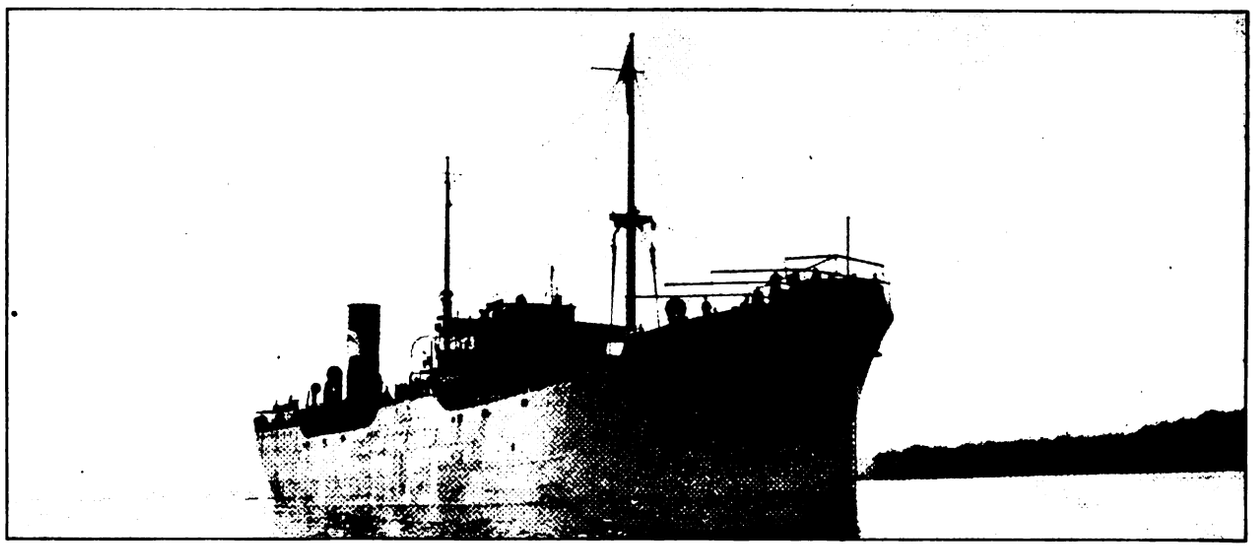
Dutch Boy Red-Lead

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

ISHERWOOD SYSTEM

For

Passenger Vessels, Oil Carriers, Lake Steamers, Freighters and All Classes of Floating Vessels



S. S. SAN LAMBERTO

Built at Geo. A. Fuller Company, Wilmington, N. C., for the Eagle Oil Transport Co., London, on the Isherwood System.

J.W. ISHERWOOD, 17 Battery Place, New York, U. S. A.

And at 4 LLOYD'S AVENUE, LONDON, E. C. 3

The following statistics show the extent to which this longitudinal system of ship construction has progressed and the number of ships ordered dur ng each particular year:

Year	No. of Ships	Deadweight Capacity
1908	6	31,608 tons
1909	30	181,384 tons
1910	40	271,760 tons
1911	64	474,043 tons
1912	100	818,553 tons
1913	30	215,686 tons
1914	41	358,288 tons
1915	157	1,196,899 tons
1916	152	1,117,779 tons
1917	180	1,655,693 tons
1918	250	2,364,778 tons
1919	210	1,887,079 tons
1920	135	1,388 850 tons
Total	1395	11,962,400 tons

Please mention MARINE REVIEW *when writing to Advertisers*

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from NEW YORK PUBLIC LIBRARY

Generated on 2024-08-28 00:12 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from
NEW YORK PUBLIC LIBRARY

Generated on 2024-08-28 00:07 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from
NEW YORK PUBLIC LIBRARY

THE NEW YORK PUBLIC LIBRARY
REFERENCE DEPARTMENT

This book is under no circumstances to be taken from the Building

form 410

Generated on 2024-08-28 00:03 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from
NEW YORK PUBLIC LIBRARY

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from
NEW YORK PUBLIC LIBRARY

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

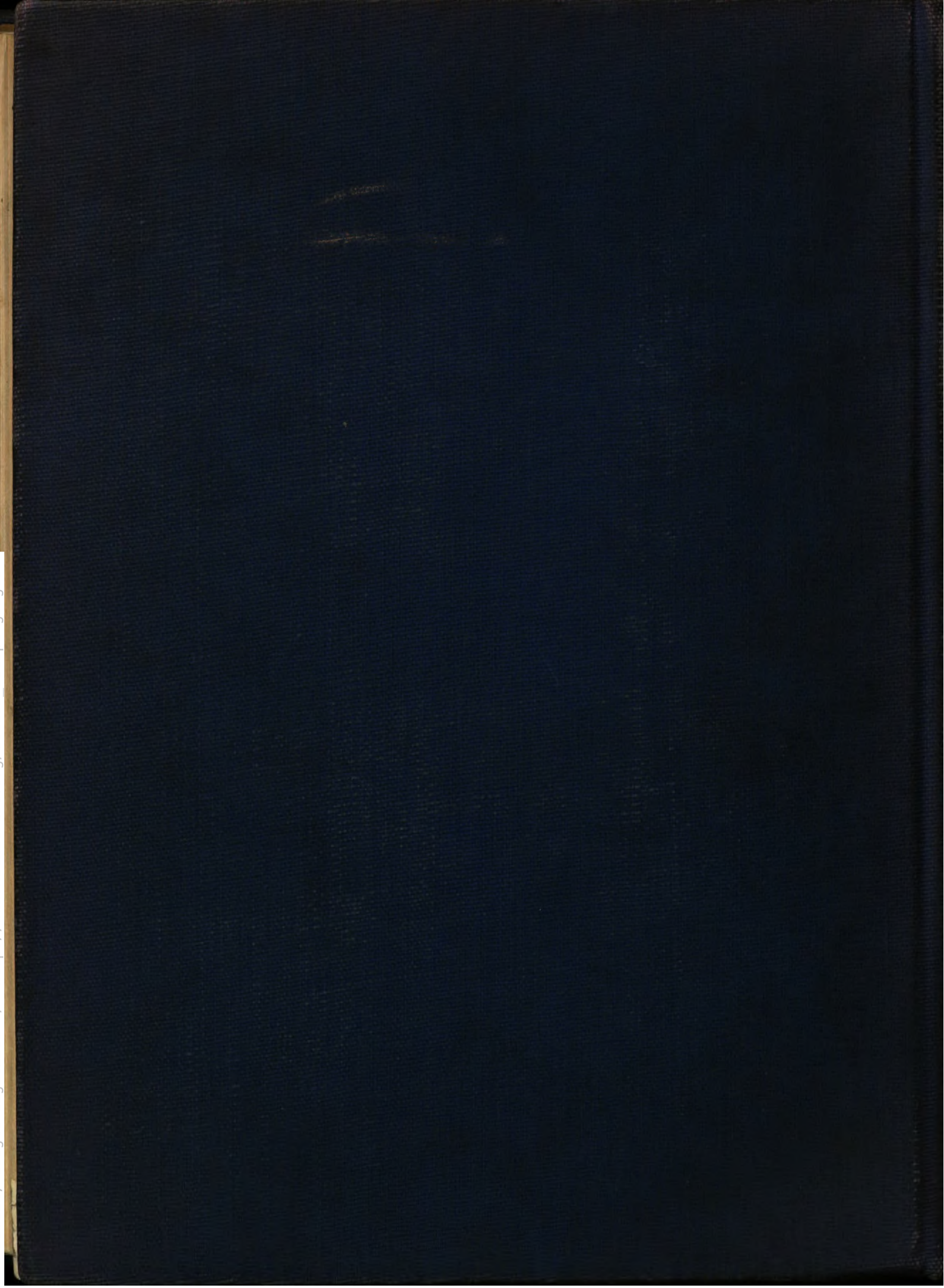
Original from
NEW YORK PUBLIC LIBRARY

PAGE NOT AVAILABLE

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from
NEW YORK PUBLIC LIBRARY



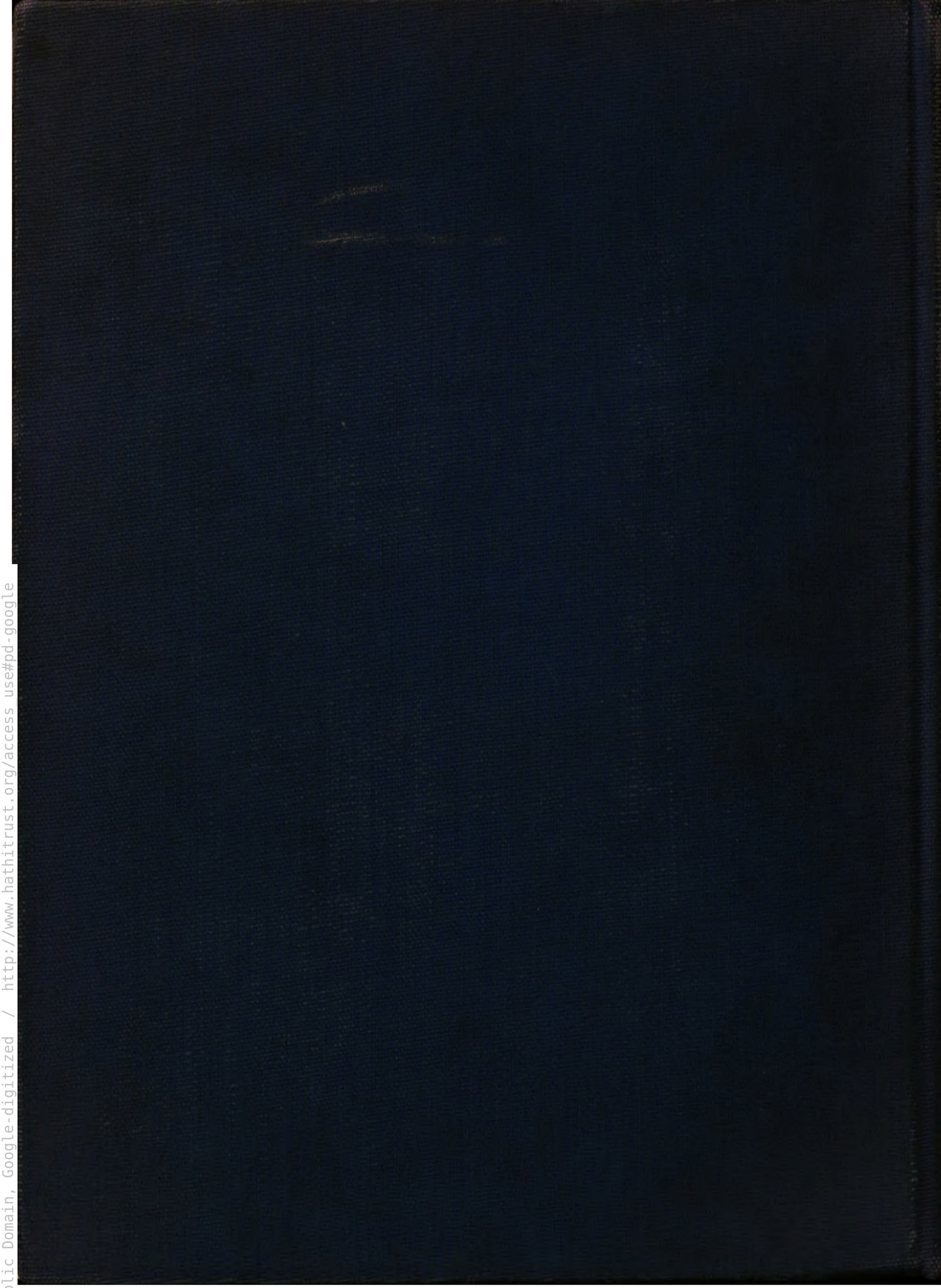
Generated on 2024-08-28 00:06 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

PAGE NOT AVAILABLE

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from
NEW YORK PUBLIC LIBRARY



Generated on 2024-08-28 00:08 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from NEW YORK PUBLIC LIBRARY

PAGE NOT AVAILABLE

Generated on 2024-08-28 00:07 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from
NEW YORK PUBLIC LIBRARY

Generated on 2024-08-28 00:04 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from
NEW YORK PUBLIC LIBRARY

PAGE NOT AVAILABLE

Generated on 2024-08-28 00:07 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google

Digitized by Google

Original from
NEW YORK PUBLIC LIBRARY

Generated on 2024-08-28 00:05 GMT / https://hdl.handle.net/2027/nyp.33433007959905
Public Domain, Google-digitized / http://www.hathitrust.org/access_use#pd-google
Digitized by Google
Original from
NEW YORK PUBLIC LIBRARY